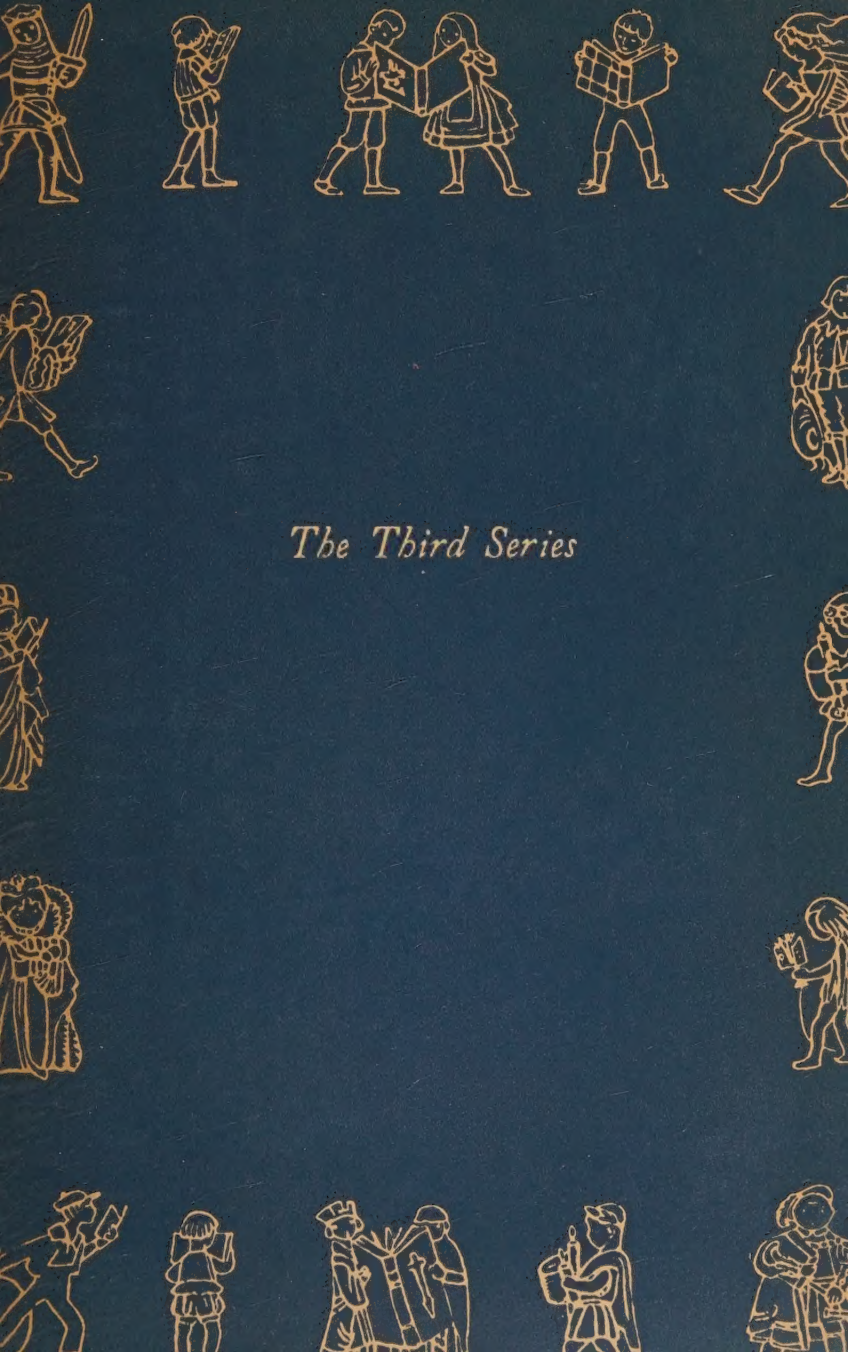
The Third Series



The Third Series

GREAT MOMENTS IN EXPLORATION

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"She was beseeching the sailors to take her back to the sloop"

What Every Child Should Know LIBRARY

GREAT EXPLORERS

EVERY CHILD SHOULD KNOW

By

MARION FLORENCE LANSING

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TO

L. W. B.

KINDLIEST OF CRITICS

PREFACE

EXPLORATION has created the united world of to-day. It has blazed the trails along which commerce and civilization have made their slower way. It has provided the channels through which the intercourse of the world has flowed in an ever-increasing current.

Other agencies have furnished the explorer with many of his incentives and with the wherewithal for realizing his vision. The desire for trade has put into his hands the resources that have made his journeyings possible. The longing for conquest and treasure has made the kings and rulers of the earth his powerful backers. The zeal of the missionary cause has supplied the motive for many an expedition to the homes of backward races. But the men who sailed forth over trackless waters or plunged into unknown wildernesses were always bigger than the kings or traders who urged them on, bigger than the instruments for travel with which the knowledge of their day equipped them. Theirs was the passion of the explorer, the undying quest for that which lay beyond. To them, as to Kipling's explorer, came the whisper,

> "Something hidden. Go and find it. Go and look behind the Ranges—
> Something lost behind the Ranges. Lost and waiting for you. Go!"

Explorers have always speeded up the world's progress. Left to itself mankind plods along at a steady rate, building homes, erecting cities, creating stable governments, and adding in each generation to the heritage received from the fathers. But the pioneer souls of the race are never content to move at the pace of the plodders in life's procession. They forge ahead and spy out the land and bring back word that it is good. Then the whole march of mankind is quickened, as others catch the vision from those who have gone on ahead and move forward to enter and occupy those promised lands.

Explorations have always been news. When Homer sat in the market-place and told of the adventures of Ulysses, men and women dropped their tasks and children left their play to listen to his words. Marco Polo had to prove his identity when he returned to Venice after an absence of twenty-five years; but when he put aside the ragged garments in which he had arrived and donned the crimson robes of velvet and satin which he had brought from the Far East, the whole city flocked to hear his story. Kings and queens welcomed Christopher Columbus and Francis Drake with triumphal processions, and the story of the opening of the tomb of King Tut-ankh-amen was featured on the front page of every newspaper in the United States. The whole world waits and watches while Lindbergh is off on one of his flights. At moments

like these our souls breathe deeply of the air of a world larger than that of our daily routine, and we come back to our own tasks inspired and uplifted.

Every boy and girl, every man and woman, has a touch of the spirit of the explorer. This is the inextinguishable flame which lights us on our way. It is to fan this flame that this book is written. Great moments of the past are important only as they spur us on to make our own moments greater. Forty episodes, selected from history, can give only a glimpse of the progress of exploration from the geographical and scientific standpoints. But forty episodes, each typical of its period, can give a vivid picture of the remarkable progress of mankind. Exploration has not been limited in its enterprises to geographical discovery. Men have delved in the earth for hidden treasures and forgotten cities; they have searched the floor of the ocean to find out its secrets. Always the spirit has been the same. Every story in this book should carry on the work. It should speed the progress of mankind by making us step faster on our way and hold our heads higher as we go because of the glimpse it gives of the indomitable, ever-onreaching spirit of man which has within itself the power to conquer the earth.

"Man is himself
"The key to all he seeks."

Cambridge, Massachusetts,
June, 1928.

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IN THE DAYS BEFORE HISTORY

The Story-teller Speaks
When the Sun Turned Round
The North, the Sleeping Palace of the Sun

IN THE DAYS BEFORE HISTORY

The Story-teller Speaks

AN OLD blind man, gentle-faced and beautiful, was led into the market-place of a little Greek village and seated carefully on the stone bench by the fountain. Hardly an instant had he sat there in quietness, listening to the ripple of the water as it splashed in the basin of the fountain, when there came to him the sound of the running feet of children and the slower steps of men and women.

"The poet, Homer—he is at the fountain," the word was passed from lip to lip.

All the village dropped its toil and went to sit on this sunny afternoon at the feet of the venerable man with the white locks and the deep-sunk eyes which looked not at the sights the others saw—the village street, the blue mountains, and the bluer sea—but steadily, unmoving, into the world of the imagination, where his spirit took the chance tales of travelers and the remembered glory of the outer world and turned them into stories which held his hearers spellbound and have kept for more than three thousand years their power to charm.

One of the tales he told that day was of Ulysses, the traveler, who left his home as a young man and

returned after many years, so changed, so aged, and so weather-worn that only his dog Argus recognized him.

After the ten-year siege of Troy, where all the heroes of Greece gathered to show their prowess, the warriors were eager to make their way home quickly. Ulysses and his companions sailed forth as they had come, into the sea which should have brought them swiftly to their desired haven.

"But," so the gentle voice went on, "things were not so to be. The gatherer of the clouds aroused the North Wind against their ships with a terrible tempest, and covered land and sea alike with clouds. Night sped swiftly down from heaven. So the ships were driven headlong, and the sails were torn to shreds by the might of the winds. For nine whole days they were borne by ruinous gales over the teeming deep; but on the tenth day they set foot on the land of the Lotus-Eaters."

The people listened spellbound while he told of the charms of that fair land, where they found at the hands of its inhabitants, not the death which they feared but a welcome that was as dangerous, for there they were given of the lotus to eat.

"Now whosoever of them did eat the honey-sweet fruit of the lotus," he continued, "had no more wish to go back to the ships, but there he chose to abide, ever feeding on the lotus and forgetful of his homeward way."

So did the poet picture to his hearers the charm of the easy tropical life which has caught many a Northerner in its spell and held him from his home.

Ulysses led his men weeping back to their barques and bound them to the benches and set them rowing away to the north, leaving behind them those enticing shores (which were probably the northern coast of Africa). Their dangers were only begun, for sailing on they came to the island of Sicily, where dwelt on the mountain slopes of Etna the one-eyed Cyclops, from whom Ulysses barely escaped with his life. Again they embarked, this time to voyage, driven by contrary winds, through the narrow passage between Sicily and Italy, dreaded by all ancient mariners, where on the one side lay the sharp rocks of Scylla and on the other the mighty Charybdis, that whirlpool which had sucked many a ship into its seething cauldron.

On and on they went through great storms that destroyed Ulysses' ships and drove him ashore, thankful for the bare gift of life itself, until finally on a raft of their own building he and such of his mariners as survived made their way homeward to the fair land of Greece.

So the tale ran, as you may read it for yourself in the Book of the Odyssey, where it was written down after many days. The people listened breathless as the words fell in soft, musical cadences from the lips of the old man. While his blind eyes, gazing

inward, saw these sights of strange lands and tempestuous seas, his listeners looked out on their quiet bay and thought to themselves:

"Are there strange lands like these beyond the seas? Does the sun in its journey across the heavens look down on other folk than those who dwell within our ken?"

But if one made bold to ask him, the poet, smiling, held his peace. He had told his tale. Why should he speak of the sailors whom he had met in his wanderings who had added this picture and that to his knowledge of strange lands and stranger folk beyond the seas?

The people went back to their homes wondering. Their world was from that day forward a little less narrow and fixed in its limits. The vision of a wider world had come to them. Mayhap there was in that company some lad in whom was born the longing to go and see these other lands for himself. When there comes into the minds of men the thought that there are lands beyond the limits of their experience, there is always some adventurer who seeks to find them out. So explorers catch their vision; and so "Great Moments in Exploration" are born.

When the Sun Turned Round

In the days when the Olympic Games were new and all Greece flocked to see them, there came to

Olympia a man so famous and so popular that when the morning races were over and the javelin and discus throwing was not yet begun, the people listened eagerly while he unrolled the long scroll of his latest book and read to them of his travels. This was Herodotus, who had just come from the Senate at Athens, where he had likewise been an honored guest.

One of the tales he gave, which he had picked up in his wanderings, for he had been a great traveler ever since he was a lad of twenty, was of an Egyptian king by the name of Necho, who had lived some two hundred years earlier. He had a passion for the sea and a great desire to find out more about the world in which he lived. So he built ships on the Red Sea and hired Phoenician sailors to man them. In his day as in the days of Herodotus and his listeners the Phoenicians were the greatest sailors in the world. To these sailors Necho, the Egyptian Pharaoh, gave the directions to sail south as far as they could and explore the Red Sea fully.

So they set forth, and they sailed and sailed until they were wholly out of food. Some crews would have made their way back home long before they came to such a pass. But these men were not of that breed. All the time in the world was at their disposal. So they landed on a pleasant shore, sowed seed for a crop, waited till it came to the time of

harvest and they could gather it and store it away in their vessels, and then set forth again. Always as they went they hugged the coast as closely as they could, following where the line of the shore led them. Now it is plain that they soon got out of the Red Sea into other greater seas of which they had no knowledge.

As they sailed, trying always to keep land in sight on their right side, there befell a strange thing. The sun which had appeared to rise always on one side of their vessel turned around and rose on the other. But how could that be if, as they thought, they were still sailing westward?

Month after month they went on, landing often, and meeting many strange adventures, and many were the hours that they spent in discussing where they were and what it meant that the sun had turned round on them. They could not go back, for they had come so far that they must go on and see what was beyond. Always there was more sea ahead and more land to follow. Then behold! they came all at once to a sight which they knew. There were the Pillars of Hercules, which mark the western gate of the Sea Between the Lands (the Mediterranean Sea). To be sure, they had come to them from the other side than that which they knew. Only when they had sailed between them and come out into their own familiar sea did they know that these were indeed the Pillars of Hercules (the

modern Straits of Gibraltar). But there was no mistaking them.

How they had managed to come out there, they did not quite see. They had sailed south down the Red Sea. Then they had thought that they were sailing always westward, as they followed the line of the coast. To us it is plain that they had rounded the southernmost tip of Libya (which we call Africa) and turned northward toward the Pillars of Hercules. But the sailors still held that as they journeyed westward the sun had turned round on its course, and where it had risen on one side of the ship had all at once begun to rise on the other.

King Necho had long given them up as lost, and was surprised enough to have them sail down the Red Sea from the north when they had started southward some three years before.

"Now some of you may choose to believe that the sun turned round," concluded the traveler Herodotus, as he rolled up his scroll, "and if you do, you may. But I for one do not."

"No," muttered one of the men in the crowd, "neither do I, nor do I believe the tales you tell of the land of Egypt where you say that you have seen yourself that the people make their writings so that one reads from right to left instead of from left to right, as all sensible folk do, nor of the giants that live in Libya, nor of the little people so short

that when they stood beside you they came hardly up to your armpits. The tales these travelers expect us to believe are past all reason."

Yet Herodotus was telling what may well have been true, that Phoenician sailors had circumnavigated the continent of Africa two hundred years before his time and two thousand years before this was done in the Golden Age of Exploration by Vasco da Gama. The best proof he gives is the very fact which he found past belief, and which the sailors themselves never understood, of how the sun turned round. For if they started southward, and then turned northward, how could it be otherwise than that the sun should appear to turn round and be on their right hand when it had formerly been on their left and on their left hand where it had formerly been on their right?

So another tale was added of the adventurings of bold mariners "in the days before history."

The North, The Sleeping Palace of the Sun

Since the days of Jason and the Golden Fleece the quest for gold has sent many a man into the far corners of the earth. But who would think that men would brave the perils of unknown oceans in search of tin? Yet so it was in "the days before history."

Tin was a metal which the ancients prized highly,

for copper must be mixed with tin for the making of bronze, and from bronze they fashioned swords and spears, household utensils, tools, and ornaments. So much was bronze used in early times that one whole period of history is named by scholars "The Bronze Age."

But tin was not easily come by in those days. To be sure the Phoenicians claimed that the northern coast of Libya and the mountains of Spain were "stuffed with mines of gold and silver and tin." But their rivals, the merchants of the Greek colonies, suspected that the tin which the Phoenicians sold at such exorbitant prices did not come from that land of Spain over which they had control, but that it was brought in ships from the mysterious "Tin Islands" of the North, of which there had been rumors ever since the days of Tubal-Cain, the first forger of metals. The Phoenicians had a way of slipping off in their swift galleys and visiting rich lands of which they told little save as the silks and satins and spices and shining metals which they sold in the market-place told tales for them.

"Why should not Greek galleys seek out these Tin Islands and bring back treasure?" the Greek merchants of Marseilles were asking themselves in the fourth century B. C. "Are not Greek sailors as skilled in the lore of the sea as these grasping Phoenicians? Are there not as good captains and

pilots among the Greeks as among any people of the world? Why should the nation that has for its heroes Jason and Ulysses yield the mastery of the seas to any other people?"

So they reasoned together. Then they called in Pytheas, the famous mathematician, to advise with them. He had made studies—so it was said—of the tides, connecting their movements in some strange way with the moon, and was even now beginning a learned book, "The Circuit of the Earth," in which he was to tell all that he had learned of the swift ocean river that encircled the world and of the lands that lay within its embrace.

They had not dared to hope that Pytheas himself would undertake the voyage for them. But when they talked with him they found that he had grown weary of vague rumors of the lands of the North and desired to go thither himself and see what lay behind the varied tales.

So Pytheas set forth in the year 333 B. C. in ships which the merchants had provided, sailing out from the broad Mediterranean into that swift-flowing river which might carry him anywhere in its circuit around the earth, for Pytheas and the men of his time believed the earth to be a flat plane with all the land in the center. Around it this river lay like a hoop, bounding it and closing it in on every side. He would see for himself the tall dwellers of the North, who wore long tunics and black cloaks and

kept cattle from which they made their living. He would buy from them tin and amber and the skins of animals, for he had in his vessels a store of pottery dishes and of salt and of bronze tools and weapons such as they sought in exchange for their wares. Perchance he might even make his way to that land at the back of the north wind where there was no cold, for there the sun shone night and day and swans sang like nightingales all the day long and no man worked, save to go out and pick his food from the trees.

Pytheas did not find that fabled land, but he did find the land where the sun set for only two hours, that land which he named the "Sleeping Palace of the Sun," for there the sun must dwell in that brief time when it was not aloft in the heavens journeying in its daily course around the circuit of the earth. He came first, however, to the Isles of Tin, where he could buy his precious metal; he journeyed along the coast of Britain, which he thought to be a "new world" of enormous size; he visited Holland and saw the people struggling with the devastating tides which swept in over their marshes, for the natives had not yet learned the art of building dikes and thus making their homes safe. Because of his own studies he watched these tides with great interest. But when he got home, he found that even the scholars of Marseilles would not believe his stories, for they lived on the land-locked

Mediterranean and had never seen the sea ebb and flow after this fashion.

After his mission for the merchants was done, Pytheas did not turn at once homeward. He went on, past the mouth of the Elbe River, where amber was cast up on the shore at high tide, into the northern ocean until he came to the land of Thule, that fair and far-away land which was to be from this time on for a thousand years the center of myth and legend. Six days north of Britain he placed it, measuring the distance by the time he took to sail there.

"But who in his senses could believe this?" writes Strabo, the Greek geographer. "Men could never dwell so far north as that." Pytheas proved himself, continues Strabo, to be "the falsest of men," for he said that "after one day's journey to the north of Thule, they came to a sluggish sea where there was no separation of sea, land, and air, but a mixture of these elements into something like the substance of jellyfish, through which one could neither walk nor sail." As they went on, this substance, which was neither air, nor earth, nor water, grew harder, so that it held the vessel fast as if spirits were reaching up from the bottom of the sea and keeping it in their clutches. But who would believe that water could ever become hard like that? Not the wise men of southern France and sunny Spain who had never known bitter cold and

THE NORTH, THE SLEEPING PALACE OF THE SUN

The Arctic seas were visited by sailors from the Mediterranean in 333 B. C.

SURRENDER OF PORUS TO ALEXANDER THE GREAT, IN INDIA

The troops of Alexander had never seen so strange a sight as the battle elephants of Porus

never seen ice or dreamed of such a thing as frozen water.

Pytheas, when he reached home, declared that he had found the end of the world, the Sleeping Palace of the Sun, beyond which no man could journey and return alive. He wrote his book, "The Circuit of the Earth," and added to it a diary of this voyage that he had made in the year 333 B. C. But the book has been lost these many, many centuries. Only from later geographers, like Strabo, who had read it and quoted from it, do we get his story.

From the little we do know, we are sure that Pytheas was one of the great explorers of his time. He had the love of adventure that sent him forth, the skill for trade that made his journey possible, and, best of all, a passion for scientific facts, which was rare in those days. He it is who leads us over from "the days before history" into the period when real geography began.

THREE GREAT RULERS

Alexander the Great in India
Asoka, Missionary Emperor
Julius Caesar

THREE GREAT RULERS

Alexander the Great in India
326 B. C.

EVERY Athenian schoolboy could have told the tale of the first "Great Moment in Exploration" which we take from the pages of history, for Alexander was a boy's hero. Yet in the two thousand and more years since it took place, its story has been almost lost to memory.

Well might the young king Alexander be the hero of every Greek boy who longed to go forth and conquer his world, for was there ever a hero like him? Manager of his father's kingdom at sixteen, seated on his father's throne at twenty, emperor and world conqueror before he was thirty! And was there any moment in his life more thrilling than the one when, after having conquered all the known world and traveled with his army for many months into the heart of the unknown lands of India, he stood with his foot-soldiers and cavalry on the banks of the river Hydaspes, face to face with King Porus, who had mustered a huge army to meet and drive back the foreign invader. East and West met on that river bank as they had never met before.

The troops of Alexander had seen many a strange sight in their long march to the East, but they had never seen so strange a sight as the battle line of Porus with huge elephants stationed at every fifty feet along the river bank.

There had been great moments all along the way, from the time when the ambitious and headstrong young king refused to be content to sit on the throne of all the Persias and listened with eagerness to the tales which dark-skinned traders told of kings and countries in the farthest reaches of the world.

Greatest of all, perhaps, since it showed the spirit of the king and the loyalty of his army, was that moment at the top of the mountain pass which led into the land of the Hindus when Alexander set fire to his own baggage, and all his men did likewise. It was two years since they had left the luxurious court and gone forth on this campaign. They had worked their slow way through the great provinces of Afghanistan, Bokhara, and Turkestan, conquering as they went. On the night before they were to go over into the Hindu country Alexander, looking at his troops, saw that they were too heavily laden with the spoils of war to set forth successfully on such a military expedition. The troops were ready and eager to start. Yet they clung, as men would, to the treasures which they had won in two years of hard fighting. Suddenly, in the early morning, when

all were ready for the order to march, Alexander set fire to his own baggage. Then and then only, when they could see the smoke rising from the flames which were consuming his own treasures, did he give his men the order to do likewise with their own baggage. Within an hour the smoke was rising from hundreds of such fires. By noontime Alexander had an army which had stripped itself to bare necessities for a forced march through an enemy land. The snow-filled passes of the Hindu Koosh, sixteen thousand feet above the sea, could be traversed quickly by such an army as this.

This was in the spring of 328 B. C. For two years more he moved on into India, allying himself with a king here, fighting a king there, setting up cities which were named Alexandria in every province, taking cities which had been reputed to be beyond the power of any army to conquer. The south was his; all the country west of the Indus was his. Now he must cross the river Hydaspes and meet a king who was a worthy foeman, King Porus, who had been gathering for many weeks an army which should stop the progress of this mighty invader before whom his weaker neighbors had been laying down their arms.

It was spring when Alexander came up to the river, and the rains with the melting snow from the mountains had swollen the stream so that it was in many places more than a mile wide. On the far-

ther side he could see the army of Porus, with two hundred elephants marking off the length of the battle line. To cross over directly was impossible. Alexander had ordered his vessels sawed in two or three sections and brought secretly to a point farther up the river. At the distance of a day's march from the camp he had them stationed, for here he planned to make the attempt to cross. Then he divided his army into several columns, which he kept moving up and down the river, as though seeking a place where they might make a sudden sally. Night after night he sent his cavalry out, and night after night Porus moved his elephants and men to the spot where the noise of attack was greatest. But when he had done this repeatedly and no attack was made, he ceased to move these ponderous beasts and sent only a few men to find out what was happening.

One night Alexander himself set out with several divisions of his choicest troops, marched them at a distance from the river, so that their movements could not be seen, and came to the island by the help of which they planned to make the crossing of the wide stream. It was a perilous crossing. Alexander himself went over in a small galley. Many of his men floated and swam across on skins filled with straw. At last they arrived on the northern bank, there to be met, soon after they landed, by Porus' son, with a section of the Indian army. Four

hundred were slain, and the young prince was killed in that first encounter. But Porus did not give in after this disaster. Both he and Alexander advanced with their armies till they met in the great battle. The conflict was long and the slaughter terrible, but in the end the forces of Porus were routed, and the king himself, who had directed from the back of an elephant the movements of his troops, was left on the field almost unsupported. Still he would not retire until the last troops were overcome, but when at last he turned to retreat Alexander sent one of his Indian friends to bring him back. This friend found the king had been sorely wounded in the battle, but after he had drunk some water he bade the man lead him to Alexander.

Seeing Porus coming Alexander rode out to meet him. When he saw him approaching, so the old chronicle reads, he checked his horse and sat "marveling at his noble, stately figure and his stature, for he was very tall. He marveled and admired him, too, that Porus did not seem cowed in spirit, but advanced frankly and fearlessly, as one brave man would meet another brave man, after gallantly struggling to defend his throne against another king."

Alexander was the first to speak, bidding him say what treatment he would fain receive at his hands.

"Deal with me royally, Alexander," said King Porus.

Alexander was pleased at the word and said, "For mine own part, Porus, royally be it unto thee; but in thine own part what is thy royal desire?"

"Royally covers it all," replied King Porus. "I seek only to be dealt with in kingly fashion, as one king deals with another."

So these two brave men of the West and East met and each found in the other a kingship he could respect. Alexander did deal with King Porus in a kingly way, turning back to him the rule over his own kingdom as he had had it before the battle.

Alexander stayed for a month in the capital of the kingdom as guest of the Indian king, and then started on his next march. But he was not to go far. When he began to plan other campaigns, his men grew weary. "Even the hoofs of our horses are worn away by continual marches," they said.

So Alexander reluctantly turned his face homeward, building before he departed on the river of his farthest journeyings twelve great altars as a sign for all time of the conquests he had wrought in the East. Had he lived longer, he would doubtless have returned; but the young emperor died at thirty-two. His service in the field of exploration was great. Other men had journeyed to the Far East and returned. He was not the first one to do that. But with the march of Alexander and his

army, the whole world came to know of regions and peoples of whom only a few had known before. He turned the attention of the world to the Far East. As an explorer he doubled for the people of Mediterranean lands the size of their known world.

Other kings and conquerors had become content after they had reached their first goal and settled down in luxury to enjoy it. Alexander had the restless spirit which drove him always onward to new goals. "What has Alexander to show for all his conquests?" he once asked his soldiers, when they protested against some one of his plans. "What has he to show save this paltry purple robe and this worthless diadem? Does Alexander fare more sumptuously than many of you? Who among you has worked as hard as Alexander? Who can show more wounds? Let the bravest among you stand forth and bare his breast, and your king will show wound for wound, and yet more wounds than he. No weapon that the enemy has borne or hurled but has left its mark upon Alexander. Spear, sword, arrow, dart, stone and bolt have left each one its witness on Alexander's person."

His words were true. He made himself as conspicuous in battle as King Porus had been on his elephant. The two men stand out in history as worthy representatives of the East and West, each treating the other in kingly fashion in the great moment of their meeting.

Asoka, Missionary Emperor
3rd century B. C.

An Indian monk clad in the yellow robe of the Buddhist faith, walked along the valley of the Ganges and did reverence at one shrine after another as he followed in the footsteps of his great religious master, Gautama, the holy Buddha, who had dwelt in the region two hundred and fifty years before. Many pious Buddhists had made that pilgrimage before him; hundreds of thousands were to make it after him. Yet this pilgrimage stands out as an event in the world's history, for this particular monk was a king. When kings, in the olden days, adopted a new religion, they made history, for what a king believed his followers were expected to believe. So it was when Constantine embraced Christianity. So it was when Asoka, king and emperor of India, adopted the Buddhist faith.

Asoka's grandfather ascended one of the thrones of the Indian provinces five years after the visit of Alexander the Great to the East. He built up a great empire, which was ruled by his son and then by his son's son, Asoka. For ten years Asoka ruled as other good kings have ruled, with nothing to make his reign unusual. Then he turned Buddhist, and from that moment began to be a great missionary ruler and a great traveler.

One wonders sometimes how people of the thir-

tieth or fortieth centuries A. D. will learn of the deeds of our great men, as we know of the movements of the kings of two thousand and more years ago. Will books printed on paper last as did the stone pillars which Asoka was so fond of setting up? They tell so much, these records in stone. On one pillar he reports that on this journey he has changed camp two hundred and fifty-six times, a record that shows a long journey. In his "Rock Edicts," as they are now called, he gives commands to his people as kings and presidents might issue proclamations, with the order that they be read to the people three times a year. The edicts read like the letters of a father to his son. Next to an exhortation to obey parents comes an injunction to plant trees by the wayside and to dig wells for pure water. Happily for us they give also some record of his journeys.

How far Asoka's own travels led him we do not fully know. He probably covered a large part of India himself. But either he or his missionaries visited three continents. They went in Eastern Europe up into Macedonia, the home of Alexander the Great. They journeyed over Western Asia, visiting the province of Syria, and they crossed North Africa, including Egypt. The nearer regions of Ceylon, South India, and the slopes of the Himalayas were all brought into the new faith.

Before Asoka's time the religion of Buddha was

believed by a small company of people of a single nation. It became through his efforts a world religion, which has lasted in the parts of the world where he established it until our own day. This alone would put Asoka high in the gallery of great men of history. One of the seven greatest figures the world has ever known, one historian has called him. To plant a new faith over such a vast amount of territory is to do more than change the people's beliefs. It is to unite them in a common faith. When men hold the same faith, they know that they have something in common and are the more ready to understand one another. So radio and airplanes are making the world smaller in our own day by uniting men through common interests.

It was a lovely message which the missionary emperor brought to the warring tribes and nations of his time. Asoka looked back with horror on the first ten years of his reign when he had gone to war as other kings went, to conquer new territory for himself. The message of the new faith was one of peace. All life was to be held sacred. There was to be no persecution of men of other faiths. "All men are my children," the emperor wrote, and for all men he desired only good.

History honors Asoka as a wise lawgiver, an able and far-sighted ruler, and a great road-builder. Exploration gives him a place in its annals not only as a great traveler but as an explorer whose

aim was to set up both at home and abroad an empire of peace.

Julius Caesar

55–54 B. C.

Julius Caesar, as every schoolboy knows, was engaged during the years from 58 B. C. on in the the conquest of Gaul. During that period he twice looked beyond the borders of Gaul into the less familiar lands beyond and made up his mind that he would go over into them. In each of these adventures he is explorer as well as military leader of his troops. In each we catch sight of qualities in Caesar which are vivid and human and interesting. As he stands on the banks of the Rhine, looking across, and resolves to build a bridge and go over into the country of the Germans, and as he takes ship to cross the Channel to the land of the Britons, he shows himself not simply a Roman general but a world figure.

The Germans, who inhabited the great, unknown forest country beyond the Rhine, had made more or less trouble for Caesar in his Gallic wars. On one occasion they had even been so bold as to send him word that "the Rhine was the boundary of the Roman empire." Caesar made up his mind that it would be well to show this people that the Romans could cross the Rhine into their country as easily

as they could cross over to harry the Romans and Gauls. But let him tell in his own words the story of the bridge that was built, used for only eighteen days, and then torn down.

"The war with the Germans being ended, Caesar for many reasons resolved to carry his army over the Rhine. . . . But to make use of shipping appeared to him neither safe, nor suitable to the dignity of the Roman name. Wherefore, although he knew that the making of a bridge would be attended with very great difficulties, on account of the breadth, depth, and rapidity of the river, yet he was of the opinion that in this manner alone ought he to carry over his army, or lay aside the design altogether."

There follows an account of the building of the bridge, which proved, as he had anticipated, to be no easy matter. Yet it was promptly and efficiently done.

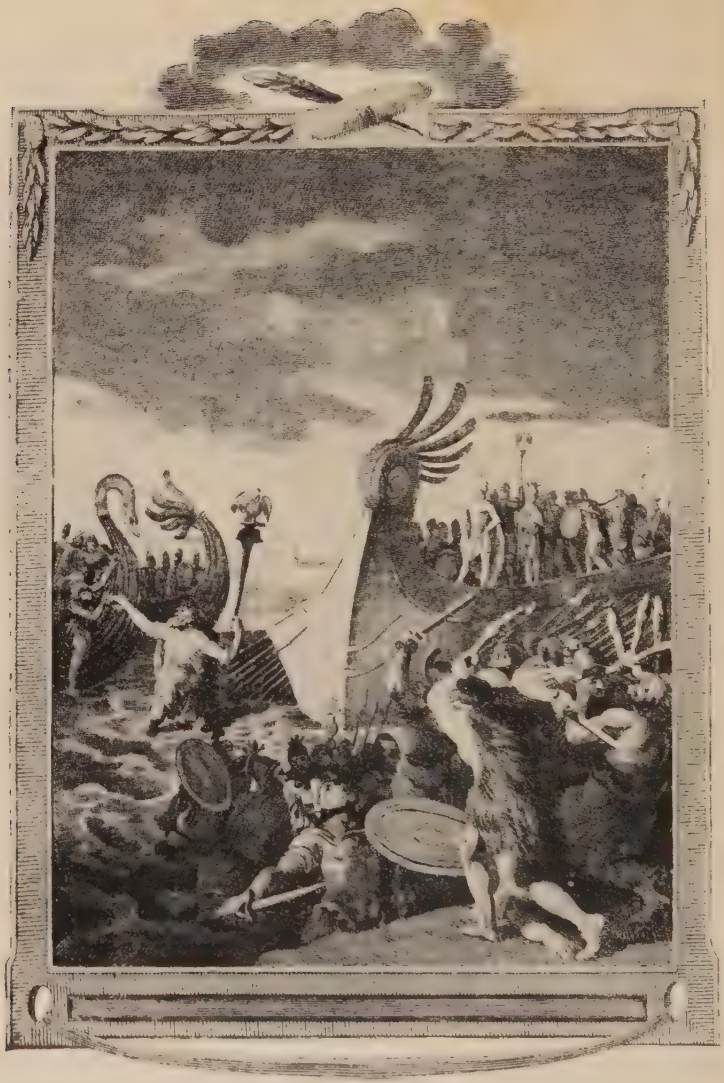
"The bridge being finished within ten days of the time they began to fetch the materials, Caesar led over his army. . . . Meantime ambassadors arriving from several states to desire peace and court his alliance, he gave them a very favorable reception."

Even before he crossed over, the bridge had begun to serve its purpose. The people beyond the Rhine were sending ambassadors to "court his alliance."

Arrived on the other side of the Rhine, he found

A Priest of the Ancient Faith

The Buddhist Emperor Asorka was one of the great explorers of the East



LANDING OF JULIUS CAESAR IN BRITAIN

Caesar thought "that it would be of no small advantage to take a view of the island"

the people who had made him trouble had vanished into the forests. He did not attempt to pursue them, though he destroyed their crops and burned their villages. Indeed, he stayed only eighteen days. Then, as he concisely puts it, "having accomplished all he intended in carrying his army over the Rhine, by spreading a universal terror among the Germans . . . thinking he had done enough both for his own reputation and the service of the Republic, he led back his army into Gaul, and broke down the bridge."

Ten days to build the bridge, eighteen days on the farther side of the Rhine, then back, with the bridge torn down—this is the story of the proud gesture by which the Roman leader impressed himself on the German people. He did not go for battle or conquest of new territory. He went to show the people that theirs was no remote land into which the Romans could not enter. He built his bridge; he entered their country with his army; he returned. But that bridge and that crossing were not forgotten for many and many a day. The Roman civilization had challenged the barbarian independence.

During this summer the fever of exploration was upon the Roman leader. He had hardly returned from the Rhine adventure when, "though but a small part of the summer remained, for in those

regions (Gaul stretching very much to the north) the winters begin early; nevertheless Caesar resolved to pass over into Britain." The story reads almost as though he felt that he must explain and apologize for the trip over the water. There was evidently no military reason which made the voyage an obvious necessity. But "he thought that it would be of no small advantage if he should but take a view of the island, learn the nature of the inhabitants, and acquaint himself with the coast, harbors, and landing-places, to all of which the Gauls were perfect strangers."

Caesar went over to Britain twice, in this summer and again in the next. He leaves a clear and interesting account of the islands and their inhabitants. He did not accomplish anything of great permanent benefit by his expeditions, although he did appoint before his second departure a yearly tribute which the conquered Britons should pay to the victorious Romans.

He did, however, acquaint the Romans with the fact that there were islands beyond the Channel which might become of importance, but to which they, like the Gauls, were "perfect strangers." These exploring expeditions of his were the first step in that movement which was to result a hundred years later in the Roman occupaton of Britain, an occupation which had far-reaching effects in history.

They are picturesque, these two ventures of Caesar's! History dwells on his success as a Roman general and administrator. His biggest work lay, doubtless, along those lines. But the spirit which inspired all his enterprises is never better shown than when he looked across the Rhine and the Channel, and knew that he could never be satisfied till he had set foot on those shores. That spirit made him more than a Roman leader; it made him a world figure, one of the greatest men in history.

TRAVELERS' TALES

Leif the Lucky
Sinbad the Sailor
The Friars and the Great Khan
The Adventures of Marco Polo

TRAVELERS' TALES

Leif the Lucky

1000 A. D.

TRAVELERS' tales are of many sorts, tales of strange peoples, of kings and countries, of lonely journeys, of gold and silver and many other marvels. But the tales that were told by the men of the North, as they sat around the fires on the long, cold winter days, were always of the sea.

Like the pull of a magnet on iron was the lure of the sea to the Vikings. Land there must be, on which to dwell and build homes and go through the routine of daily life, but for adventure, for freedom, for all that made the joy and zest of life, there was the sea.

From other countries men ventured forth on the waters for trade and conquest. The Norsemen needed no errand save their own desire. "Sea-rovers" their neighbors called them, and prayed daily in their churches, "From the fury of the Vikings, Good Lord, deliver us!" More than any attack made on them by land the people of France dreaded the hour when a swarm of high-prowed Viking boats might sail up one of their peaceful

rivers, turning loose their sailors to pillage the countryside before they stole away over the waters as swiftly and silently as they had come.

Yet sailing up narrow rivers, even for booty, was not the adventure which the true Norseman sought. Men of other races might hug the coast and keep always within sight of land. The men of the North scorned such safety. For them the open sea! Without compass or chart they set their prows to the north, south, east, or west, and went where the Storm King took them.

"Whither goest thou?" a young Viking captain was asked, as he prepared to sail forth on his maiden voyage as commander of his ship.

The tall, blond giant looked at his questioner and then away to the sea, his eyes as blue as the blue waters that stretched before him. Then he pulled from his cap a red feather and tossed it in the air.

"Where the feather points," he said, as the wind caught it and blew it away. "All the world is before me. What matter? Let the feather decide."

So they roved the world over, trading where they would, fighting if the occasion arose, but never leaving for long the ships with dragon beaks and dragon tails which had brought them into port. Their ships were their pride. They loved them as few sailors have ever loved their ships and few landsmen their homes. There is a story of Sigurd, "Jerusalem-farer," on his way back from one of the

crusades, that he lay for two weeks off the coast of Greece, though he had a favorable wind from the south to carry him through the narrow Hellespont, preferring to wait for the side wind which should let him set his sails lengthwise along the line of his ship, so that the people on both sides of the strait and of the harbor of Constantinople could see at their best his gorgeous purple sails with their stripes and gay figures.

There was only one thing that the Norseman loved as much as he loved the sea; that was his freedom. The two loves went hand in hand.

So when one of the chieftains of Norway defeated many of his fellow chieftains and made claim to rule over them, those who were too proud to brook such overlordship took to their boats and went over to start a colony in Iceland where they could find space to live in liberty.

For such a reason Erik the Red went to Iceland. But his spirit was too proud and independent for even that colony. He was outlawed, and taking his boat sailed off to that land where no man dwelt, of which sailors had brought back reports, the land which he named "Greenland," for if it had a good name, he said, people would want to go there.

Greenland had space enough for him, but not for his son Leif. To him came tales of a land past which Norse ships had lately sailed when driven

out of their course by storms. Biarni, the son of Herulf, had seen these lands, and him Leif went to visit. This was Biarni's tale, as he told it to Leif.

"We put out to sea to sail to Greenland, and sailed for three days, until the land was hidden by water, and then the fair wind died out, and north winds arose, and fogs, and we knew not whither we were drifting, and thus it lasted for many days. Then we saw the sun and were able to get our course. We hoisted sail and sailed that day before we saw land. When we saw the land, we did not know what it was, but I was sure it was not Greenland. We sailed close to it, and saw that it was level and covered with woods and had small hills."

"But know you nothing more of it?" asked Leif impatiently. "Did you not land? Saw you no people?"

"No," replied Biarni. "But let me tell you. We left that land and sailed two days and saw another land, and the sailors asked me if it was Greenland yet, and I said that it could not be, for in Greenland are many ice-mountains, and here the land was flat and wooded."

"And did you not land there?" asked Leif.

"No, we sailed yet three days more and saw yet another land, with ice-mountains on it, but it was only an island. But the same fair wind held, and so we went on and after four days we saw a fourth land. Then said I to my men, 'This is most like to

Greenland, as it hath been told me concerning it, of any land we have seen, and here we will steer to land.' So we landed and it was indeed Greenland."[2]

So Newfoundland and Labrador, and what other parts of the Atlantic seaboard we know not, were seen from Biarni's vessel as he tried to make his way from Iceland to Greenland, and he did not deem it worth his while even to land on them. Not so Leif! No sooner did he hear this tale than he bought Biarni's ship and collected a crew of thirty-five men.

Consider the wide Atlantic; think, if you will, of the long stretch of coast from its most northerly region down the coast as far as Maine or Massachusetts, and hear the simple annals of the sailor explorer as he touched at one point after another. He did not know he was making history. He could not dream of the vast continent that stretched back from this coast which he visited. He simply sailed on, and on, landing here and there where it seemed good to him, and when he had gone as far as he pleased, he turned his vessel homeward. He had made his voyage; he had found the new lands. That was his interest. Let those who would follow!

"They sailed out to sea," so the old chronicle reads, "and found first that land which Biarni and his shipmates found last. They sailed up to the land, and cast anchor, and launched a boat and

went ashore, and saw no grass there; great ice-mountains lay inland back from the sea, and it was flat rock all the way from the sea to the ice-mountains, and the country seemed to them to be entirely lacking in good qualities."

So they left it behind them, and sailed out again and found a second land. Here also they did not stay. But after sailing a few days more, they came to an island and went ashore for a time. Again they set sail, and came "into a certain sound, which lay between an island and a cape, and they stood in westering past the cape."

So far the story reads as though looking at lands and sailing past them to other lands was all they were likely to do. But now they found a place which looked to them so good that they took their ship up a river into a lake and carried their hammocks ashore and built booths there, and planned to stay for the winter. "There was no lack of salmon there either in the river or in the lake, and larger salmon than they had ever seen before. The country thereabouts seemed of such good qualities that cattle would need no fodder there during the winters. There was no frost there in the winters, and the grass withered but little. The days and nights were of more nearly equal length than in Greenland or Iceland."

So the story might have ended, and we should have had the bare facts of the first visitation of our

own continent of North America. But they are bare facts, as bleak as the ice-mountains of the voyage, with little picture of the men who made that discovery or of their delight in the land which they sailed so far to find. Happily the story does not end here. They built a house for the winter.

"When they had completed their house Leif said to his companions, 'I propose now to divide our company into two groups, and to set about the exploration of our country; one half of our party shall remain at home at the house, while the other shall investigate the land, and they must not go beyond a point from which they can return home the same evening, and are not to separate from each other.' Thus they did for a time; Leif himself, by turns, joined the exploring party or remained behind at the house. Leif was a large and powerful man, and of a most imposing bearing, a man of great sagacity, and a very just man in all things."

So things went along for a time, with the parties returning each night and describing the country which they had seen. Then one evening Tyrker, one of the older men, who had lived with Leif and his father when Leif was a child and been very devoted to him, was missing.

"Leif severely reprimanded his companions, and prepared to go in search of him, taking twelve men with him. They had proceeded but a short distance

from the house when they were met by Tyrker, whom they received most cordially. Leif observed at once that his foster-father was in lively spirits. Tyrker had a prominent forehead, restless eyes, small features, was diminutive in stature, and rather a sorry-looking individual withal; but was, nevertheless, a most capable handicraftsman."

Can you not see the picture—Leif, tall and commanding, and Tyrker, small, eager, excited?

"Wherefore art thou so belated, foster-father mine, and so astray from the others?" asked Leif.

At first Tyrker, who was a German by birth, was so excited that he talked only in German, which they could not understand, rolling his eyes meanwhile and smiling broadly. Then he came to himself and began to address them in the northern tongue.

"I did not go much farther than you," he said, "and yet I have something of news to relate. I have found vines and grapes."

"Is this indeed true, foster-father?" said Leif.

"Of a certainty it is true," replied Tyrker, "for I was born where there is no lack of grapes or vines."

They slept the night through, continues the chronicle, and on the morrow Leif said to his shipmates: "We will now divide our labors, and each day will either gather grapes or cut vines and fell trees, so as to obtain a cargo of these for my ship."

With grapes and vines to show to their neighbors

at home as a sign of the fertile southern land where they had wintered, and a cargo of lumber besides, they could return from their voyage of exploration with pride.

"They acted upon this advice of Leif," the story continues, "and it is said that their after-boat was filled with grapes. A cargo sufficient for the ship was cut, and when the spring came, they made their ship ready and sailed away. And from its products Leif gave the land a name, and called it Wineland."

They sailed for home and had fair winds until they sighted Greenland. Almost at the end of their voyage they had the good fortune to rescue fifteen men from a wrecked boat. So they came into harbor with a proud record and much to show for their voyage besides.

As for Leif, the son of Erik, discoverer of Vineland, "he was afterward called Leif the Lucky."

Sinbad the Sailor

Between 750 and 900 A. D.

Sinbad himself belongs, as you know, with Aladdin and Haroun-al-Raschid and Ali Baba, among the heroes of the tales of the Arabian Nights. But as Homer gathered up the stories of many Greek sailors and wove them into the story of the travels of Ulysses, so the story-teller of the "thousand and

one nights" made from the reports of Arab voyages of the eighth and ninth centuries the marvelous tale of the seven voyages of that adventurous young traveler, Sinbad, to whose mind "it occurred," as he says, "to travel to the countries of other people." Maps, drawn by Arab geographers within a couple of hundred years of the date of the Arabian Nights, name many of the places described in more or less fanciful style by Sinbad, who did not let truth stand in the way of telling a good story. We know that in those centuries it was the Arabs, starting off on long journeys to convert the world to the new religion of the prophet Mohammed, who contributed the most to geographical knowledge.

The Arabs were traders. Sinbad started with a company of merchants who "passed by island after island, and from sea to sea, and from land to land; and in every place by which we passed we sold and bought and exchanged merchandise." So they came in Sinbad's first voyage to an island, where they experienced an earthquake, which Sinbad describes in amazing fashion, and from these, after many adventures, he went to Borneo, where the king gave him great honors. There he stayed until a ship from home appeared and bore him, rich in merchandise of great value, to his home city of Bagdad, "the Abode of Peace."

Sinbad thought to remain there for the rest of his

DISCOVERY OF THE NEW WORLD BY LEIF ERICSSON

The Vikings crossed the Atlantic while other sailors still hugged the shores of inland seas

KING LOUIS OF FRANCE, THE ST. LOUIS OF THE CRUSADES

King Louis sent Friar William of Rubruquis, that best of reporters, to the court of the Great Khan

life, for he was enjoying "a most comfortable life, and the most pure happiness." But the lure of the explorer was on him. "I felt a longing," he says, "for the occupation of traffic, and the pleasure of seeing the countries and islands of the world, and gaining my subsistence." So he was off again, being wrecked this time on an island, probably by Madagascar, from which he has himself conveyed to India, the Valley of Diamonds, by the ingenious method of being carried by the giant roc, a bird of enormous size, resembling, according to his descriptions, some of the prehistoric birds of which science is fond of telling us.

On the third voyage he landed on the Mountain of Apes, the inhabitants of which he describes in no uncertain fashion, not concealing for a moment his terror at these creatures in human form. But having escaped from these monsters in his usual miraculous fashion, he went on to one of the Spice Islands, gathered spices and returned to Bagdad and peace and comfort. But again, as he says, "my wicked soul suggested to me to travel again to the countries of other people, and I felt a longing for associating with different races of men, and for selling and gains." The story goes on through seven voyages in which he visits India, Ceylon, and other rich countries where he gets merchandise which he disposes of at great profit in Bagdad on his return. He is entertained by kings and potentates. He

meets cannibals from whom he barely makes his escape. He is set upon by the Old Man of the Sea (probably the Giant Ape of Borneo or Sumatra). He fills his vessel with coconuts, which he later trades for cinnamon and pepper. He finds treasures of ambergris and minerals and jewels. He takes royal gifts, an Arabian horse with a saddle adorned with gold and jewels, white cloths of Egypt, silks of Suez and Cadiz and Alexandria, Greek carpets, and a cup of crystal with beautiful carved figures, presented by Caliph Haroun-al-Raschid to the Indian prince of Ceylon. He acquires ivory tusks, which he sells at a good profit, exchanging them for beautiful gifts and treasures which he brings back to Bagdad, where the Caliph causes his story to be written in letters of gold.

A naïve story it is, much embroidered in the telling, but it gives a picture of the wide journeyings and the profitable trading of the Arab merchants of the seventh, eighth and ninth centuries, who, like Sinbad, "felt a longing for seeing the countries and islands of the world, for associating with different races of men and for selling and gains."

The Friars and the Great Khan
1246–1255

There is a magic in books like no other magic in the world. A book is made up of words, simply

words; and the words are made up of the twenty-six letters of the alphabet, no more. Twenty-six letters of the alphabet scattered over pages and pages of paper: that is the whole story of books if we look at them in one way. Yet given the ability to read, which means the key to the code by which those letters are grouped, a book may have within it the power to make us see the wonders of the heavens or life beneath the sea; it may take us over ten thousand miles of desert and mountain; it may carry us back hundreds of years into a forgotten past.

Pick up with me an old Latin book, written not in the smooth Latin of Caesar or Cicero but in the "dog-Latin" taught in the church schools of the Middle Ages. It is a hand-copied book, with queer old letters. There are no pictures to go with it, no conversation to break up the look of the solid pages. It is a monk's report to his superior of a journey he once took.

But suddenly, as you glance curiously at the pages, there stand out on those pages words and names that have no business in the life of a Franciscan monk of the thirteenth century. Mongols, the Great Khan, deserts, wild horses, Tartars—there they stand. This is no ordinary report of a tame journey through Italy or France. Here is the tale of a trip of ten thousand miles, which a monk by the name of John of Carpini undertook at the

bidding of the Pope as simply and readily as though he had been a small altar boy sent to the next town with a message. Carpini's message was a letter from Pope Innocent IV to the Great Khan of the Mongols, successor of the all-conquering Genghis Khan who had brought his soldiers to the very doors of Christendom and threatened to overrun all Europe some twenty-five years before. Now his successors were considering, so the rumor went, another great invasion, and the rulers of Europe thought best to bestir themselves and see what could be done to save their countries and peoples from attack by this terrible enemy.

"We personally dreaded from these Tartars that we might be slain or reduced to perpetual slavery, or should suffer from hunger and thirst, the extreme of heat and cold, reproach and excessive fatigue, beyond our strength," writes the monk at the beginning of his account; but such fears did not in the least deter him and his companion from starting on their mission. Through Bohemia and through Russia they went in mid-winter in such cold that sometimes Friar John fell so ill that he had not the strength to mount his lean and hungry Tartar horse, but had to be placed in a cart and carried through the deep snow. It was many weary months before they came to the Volga; still they must go on into Mongolia, "though not knowing whether it was for life or death."

But good fortune was with them. The people whom they met and the companies with whom they journeyed were not so bloodthirsty or savage as they had been pictured. As they drew nearer to the heart of Mongolia they found every one excited over the great event which was soon to happen, the coronation of a new Great Khan. Princes and rulers, ambassadors, merchants, some quite civilized, others from the wild tribes of the deserts, were all flocking to see this great event. They were laden with gifts, and no one of them failed to have with him the finest of robes in which to enter the presence of the Mongol conqueror. And with them—can you not see it, as the friar's simple words picture it?—rode two Franciscan monks in their brown robes, bearing not gifts, not silver or gold or homage, but a letter from the Pope of Christendom to this barbaric Oriental ruler of the savage hordes of the Tartars, and a not very friendly or polite letter at that!

They came to a wonderful tent of red purple, a present from some conquered peoples, with a high platform of boards on which was the Emperor's throne, of ebony wonderfully sculptured, with gold and precious stones and pearls inset. Here they saw the new Khan receive his office. "A shrewd man, serious and sedate," the friar characterizes him, after some weeks spent at his court. "It was his custom never to address in person any stranger,

no matter how great he might be. He only listened, then answered through the medium of some one."

Politically the friars got little comfort from their mission. They presented their letter, and after many weeks received one in answer, which was written and rewritten and translated in different languages in the effort of each party to make himself understood by the other.

Having received the letter, they started on their long journey back. For seven weary winter months they struggled through snow across the endless plains of Asia towards Russia. At last they were at home again. The people of Europe were no safer than they were before, for the Mongol chief might at any time decide to send his hordes down upon Christendom. But Friar John must at least have consoled the Pope by telling him of the length of the journey which those same armies would have to make if they did try to attack the forces of Europe.

No great honor was paid the friar, so far as we know. It was all in the day's work to do what was set before him as a task. But in spite of the hardships he had endured, the strain of which hastened his death, Brother John must have paced up and down the cloisters of his monastery, pondering on the book he was writing, with a great sense of superiority over his brother monks. He could tell them a thousand wonders of which they had never

dreamed. He could shut his eyes and see pictures of men and scenes that no other man in Europe had witnessed. No wonder he made his report vivid and thrilling. He was the first European to make the land journey from Europe a third of the way around the globe to Mongolia.

Carpini probably talked with the next man who was to go out to Mongolia, William of Rubruquis, also a friar, who was sent by King Louis of France, the St. Louis of the Crusades, to the court of a Mongol ruler. His message was to invite the Great Khan to embrace the Christian faith, and also to express the hope that, having become a Christian, he might be moved to refrain from warfare against Europe.

Friar William was the best of reporters. A newspaper would have paid him a small fortune in these days to travel for its readers into the far corners of the earth. A big, burly man, stout-hearted, social, and the keenest of observers, he not only did his special mission well, but allowed nothing that he saw to escape him, and wrote a report that gives the first accurate knowledge Europe ever had on the geography of the regions he visited, and of the peoples, their foods, their customs, their language, and their general manner of life. Science could ill spare from its library of the past the record of the journey of William of Rubruquis.

Chilled to the marrow, half-starved, he jolted across the plains of Russia and Asia for three thousand more miles on horseback. The Mongol parties with which he traveled could not understand this long-robed, barefooted monk, come from the far land of the Franks, who sought the court of their Khan, yet brought neither presents nor arms, and was neither merchant nor royal ambassador. But they outfitted him with sheepskins, and put him in a company which was to cross the desert, where he journeyed with the Duke of Russia, Turkish lords, the sons of the king of Georgia, the envoy of the Caliph of Bagdad, and several great sultans of the Saracens.

Who was it these men came out into the wilderness of Asia to see? Mangu Khan, grandson of the great Genghis Khan, overlord of the great empire he had conquered.

It was to his traveling court that they came in December. They were roughly met by the demand of the Mongols whether they would make peace with them. To this Friar William replied, for himself and his companion monk, that having done no wrong, the King of the French had given no cause for war. "Did you not come to make peace?" they asked again, for, as the friar puts it, this people were "already so puffed up with pride that they believed the whole world must want to make peace with them."

Despite the vows of his order for peaceful living, the friar was not overpleased with the bearing of his hosts. "Of a truth, if it were allowed me," he writes, "I would to the utmost of my power preach throughout the world war against them."

But no hint of this feeling ever showed in his months of attendance at the court of Mangu Khan. They had come to pray for his soul and to convert him if possible to the Christian faith, and this they did faithfully.

After many questions and answers had been passed back and forth through interpreters between the friar and the Khan's secretaries, the day came when they might, if all went well, be given audience.

"What reverence will you pay the Khan?" they were asked.

"We are priests, given to the service of God,[2]" replied the friar. "Noblemen in our country do not, for the glory of God, allow priests to bend the knee before them. Nevertheless, we want to humble ourselves to every man for the love of God. We come from a far country. So, if it please you, we will first sing praises to God who has brought us here in safety from so far, and after that we will do as it shall please your lord, this only excepted, that nothing be required of us contrary to the worship and glory of God."

The men went into the house and reported to the

Khan what had been said. It pleased him, and they were led to the entrance of the room and the great felt curtain was pulled aside, so that they might enter. But first they were searched to see if they had any hidden weapons. The hymn sung, they were seated on a bench.

It is a curious scene that the words picture. The whole house was hung with cloth-of-gold. On the hearth in the middle burned a fire of briars and roots and cow-dung. The Khan sat on a couch covered with a spotted and glossy fur like seal's skin. He was a little man, says the friar, flat-nosed, of medium height, about forty-five years old. Near him sat his favorite wives. The friars were served with rice wine. Still the Khan paid no heed to them but amused himself for a long time with falcons and other birds. At last they were commanded to speak and bend the knee. Through an interpreter Friar William spoke as follows:

"We give thanks and praise to God who hath brought us from such remote parts of the world to the presence of the Mangu Khan, on whom he hath bestowed such great power. The Christians of the West, especially the King of the French, sent us unto you with letters, entreating you to allow us to stay in this country, as it is our office to teach men the law of God. We therefore beg your Highness to permit us to remain to perform the service of God. We have neither silver nor gold nor precious stones

to offer, but we present ourselves to do service."

Such were the gracious words of these first Christian missionaries to the Mongols, sent to one king from another. But the Khan was not pleased at the reference to gold and silver.

"Even as the sun sends its rays everywhere," he replied, "so my power extends everywhere. So we have no need of your gold or silver."

The friar explained that he mentioned gold only to make clear their desire to do service, and after the interchange of a few more polite words the interview was over. The interpreter followed them shortly to say that the Khan would allow them to stay for two months, until the extreme cold was past.

They had found at the court an Armenian monk who had made his house over into a little chapel, where he had dwelt a month. The Khan sent them fur coats to keep them comfortable, and they took occasion to send back word from their miserable quarters that they found themselves too cold and uncomfortable to pray for the Khan. So they were allowed to take up their lodging with this monk.

One day when Friar William was out, Mangu Khan evidently became curious about these two visitors who were praying so zealously for his soul, and came himself to the chapel. A golden bed was fetched upon which he seated himself with his queen. Then they sent out into the camp posthaste

to fetch the friars, searching them as usual for hidden weapons before they allowed them to enter the royal presence. One admires the dignity of these friars who broke all the rules of court etiquette by bowing first to the altar as they entered the room before they turned to bow to their guest. The Khan wished their books brought to him. So they produced the beautiful illuminated Psalter which Queen Margaret had given them, and copies of the Bible and other books. The Mongol was curious to hear their singing again. So they sang a hymn, and he departed.

They must have made a pleasant impression on their barbarian host, these simple, brown-frocked Christian men, for their dismissal in the spring has a very different sound from their curt and suspicious reception. They were offered gold, silver, and costly garments, but explained that they could not take them. At last they did take, at their final audience, a garment apiece, seeing that the Khan really wished it. He offered them safe conduct out of his country, and reaching forth his staff said to Friar William:

"Be not afraid."

"If I had been afraid," said the friar smiling, "I should never have come hither."

They were going out of his presence, and again the Khan spoke.

"You have a long way to go. Make yourself

strong with food, that you may be able to endure the journey."

So they departed from his presence, having established the most kindly and friendly relations with the great man.

But the letter which he sent back by them to their king, St. Louis, was hardly intended to be reassuring. We quote part of it.

> The commandment of the eternal God is, in Heaven, there is only one Eternal God, and on Earth, there is only one lord, the Khan, the Son of God. . . . Wherever ears can hear, wherever horses can travel, there let it be heard and known. . . . This . . . is the word of Mangu Khan to the lord of the French, King Louis.
>
> We send you in writing the commandments of the eternal God by these your priests . . . and when you shall have heard and believed, if you will obey us, send your ambassadors to us; and so we shall have proof whether you want peace or war. . . . But if you . . . shall not give heed to it, nor believe it, saying to yourselves: "Our country is far off, our mountains are strong, our sea is wide," and in this belief you make war against us, you shall find out what we can do. The Eternal God in Heaven knows.

King Louis never tried to find out what would happen if the lord of the Mongols was roused to anger. Christendom gave thanks for every year that the armies from the East did not overrun their borders. It was many years before the stoutest heart did not quail when the word was whispered, "The Tartars are coming." Yet two simple friars, John Carpini and William of Rubruquis, had

journeyed into the heart of the Tartar kingdom, dwelt at the courts of their Khans, and returned safe.

The Adventures of Marco Polo
1271–1295

Marco Polo, merchant, courtier, ambassador at large, most famous traveler of the Middle Ages—but why continue to pile up words about him? Let his biographer Rusticien, fellow-prisoner with him after the capture of the Venetian army by the Genoese, who took down his story as he dictated it from his notebooks, introduce him to us as he did to the readers of the thirteenth century:

"Ye Emperors, Kings, Dukes, Marquises, Earls, and Knights, and all other people desirous of knowing the diversities of the races of mankind, as well as the diversities of kingdoms, provinces, and regions of all parts of the East, read through this book, and ye will find in it the greatest and most marvelous characteristics of the people especially of Armenia, Persia, India, and Tartary, as they are severally related in the present work by Marco Polo, a wise and learned citizen of Venice. . . . It must be known that from the creation of Adam to the present day, no man, whether Pagan or Saracen or Christian or other, of whatever progeny or generation he may have been, ever saw or inquired into so many and such great things as Marco Polo."

Rusticien needed no modern correspondence school to teach him the art of advertising. Moreover he lives up to the best standards of the advertising of to-day, for this advance notice of the book he is presenting to the public is in the main true. The men of his own day laughed at Marco Polo's tales of black stones which the Chinese broke up and used as fuel for their fires; but the modern reader heats his house by coal. The long-horned sheep of Pamir, with horns "three, four, and even six palms in length," sounded like a myth to the people who knew only the sheep of the Swiss and Italian mountain-sides. How could there be sheep with horns so large that the shepherds made from them "ladles and vessels" for holding food and "constructed from them fences for enclosing their cattle?" But within a few years a Roosevelt has traveled half round the world to track down those same sheep and bring back specimens for the American Museum of Natural History, naming the species "Ovis Poli," the sheep of Polo, in honor of its first discoverer. Indian nuts of the size of a man's head, containing a sweet, white milk like wine, sounded incredible to the Venetians, but not to modern travelers who have enjoyed the milk of the coconut.

It has taken six hundred and more years to appreciate Polo's book, but of what other travel book of the thirteenth century are there being

printed several new editions in this twentieth century?

This book was written three years after Polo's return from the Far East. He had made his dramatic return in 1295, landing in Venice and going with his father and uncle to his old home, there to knock on the door and be refused entrance because all the Polos were long dead, so the servant at the door said. That was a moment to be remembered always in the story of travel.

Along the streets of Venice the three men had walked, gazing with interest at the changes that had taken place during the quarter of a century of their absence. They had come to their own beautiful house and stood before the door, dressed in coarse and tattered clothing, their faces lined and wrinkled from long journeying and many hardships, and their possessions tied up in gay-colored Oriental cloths. They spoke with a foreign accent, but declared that they were Maffeo and Nicolo Polo and their son and nephew, Marco, returned from foreign parts. It was little wonder that the relatives who had lived for many years in the house failed to recognize them and finally took them in only on sufferance, half-doubting all the while their story.

The Polos bided their time till they could invite all their kindred to a great feast. The guests came, curious, doubting, unconvinced; and their hosts

MARCO POLO, THE MOST FAMOUS TRAVELER OF THE MIDDLE AGES

His travel book, written in the thirteenth century, is still being reprinted in the twentieth century

By Ewing Galloway, N. Y.

IN THE LAND OF KUBLAI KHAN

Marco Polo was one of the first Europeans to see the Great Wall of China

met them in long, rich robes of crimson satin. All were seated at the table, and the three excused themselves, returning in a few moments clothed in robes of rich crimson damask, while the first suits were, by their orders, cut up and divided among the servants. The next course was served, and again the three travelers excused themselves, returning this time in robes of crimson velvet. While the guests marveled, the damask robes were cut up and distributed. When the dinner was over, they retired again, reappearing in robes of ordinary style, such as were worn by the other guests.

Were these the men who had been reported as arriving at the door of the house in rags and tatters, the guests inquired among themselves. The question was shortly answered.

"When the cloth had been drawn," so the story goes, "and all the servants had been ordered to retire from the dining hall, Messer Marco, as the youngest of the three, rose from the table, and, going into another chamber, brought forth the three shabby dresses of coarse stuff which they had worn when they first arrived. Straightway they took sharp knives and began to rip up some of the seams and welts, and to take out of them jewels of the greatest value in vast quantities, such as rubies, sapphires, carbuncles, diamonds, and emeralds, which had all been stitched up in those dresses in so artful a fashion that nobody could have suspected

the fact. For when they took leave of the great Khan, they had changed all the wealth that he had bestowed upon them into this mass of rubies, emeralds, and other jewels, being well aware of the impossibility of carrying with them so great an amount of gold over a journey of such extreme length and difficulty. Now this exhibition of such a huge treasure of jewels and precious stones, all tumbled out upon the table, threw the guests into fresh amazement, insomuch that they seemed quite bewildered and dumbfounded. . . . And when the story got wind in Venice, straightway the whole city, gentle and simple, flocked to the house to embrace them and to make much of them."

It was from the young men that Marco got his nickname. Daily the young men came to the house to ask him questions about Cathay and the Great Khan in whose court he had lived for so long. "And as it happened that in the story, which he was constantly called on to repeat, of the magnificence of the Great Khan, he would speak of his revenues as amounting to ten or fifteen *millions* of gold, and in like manner, when recounting other instances of great wealth in those parts, would always make use of the term *millions*, so they gave him the nickname of 'Messer Marco Millioni.'"

"Marco Millions!" It sounds like a nickname of our own day. Yet so the story is told by John Baptist Ramusio, who heard it when he was a

youngster from a Venetian Senator, who in his turn had heard it "from his own father and grandfather, and from other old men among the neighbors."

The Great Khan and his wealth were what interested the men of Marco's time. Even two hundred years later Columbus and other explorers were hoping to find the court of the Khan and be welcomed by his successor.

One wonders, as one reads the story of exploration, why the visit of Marco Polo to the Far East stands out like a single mountain peak in the long level stretch of two centuries. Why was not this the forerunner of many such journeys, which should bring together the two great centers of the world, that of Europe just coming into a period of culture, and the age-old civilizations of India and China (Cathay) with their wealth and prosperity? The answer can be found by those who read the pages of history. These were the years of the Crusades. After them came a time when the Turks were at the height of their power. The empire of Islam grew up between the two great civilizations of Christendom and the Far East. The followers of Mohammed shut the door which the Polos and others had pushed a little way open and delayed the intercourse of East and West until the days of the Golden Age of Exploration.

The Polos were merchants. Their amazing travels had been undertaken in the interests of trade. Marco's father and uncle had been halfway around the world before he was born. It was after a long stay at the court of Kublai Khan that they returned to find Marco a tall boy of fifteen, ready and eager to go back with them. The Khan had sent them to the Pope with a request for one hundred educated missionaries who should come to China and teach them of their religion. The Pope finally sent them back with two Dominican friars—"two friars," as one historian says, "for the whole of Mongolia, China, Tibet, Siberia, Turkestan, and Persia!"

But they had young Marco with them, and he won such favor with the Khan that he became a sort of traveling ambassador, visiting for the emperor different parts of his empire and reporting to him on the sights he saw and the condition of the country and the people as he found it. It is these observations that make his books so valuable to twentieth-century readers. The life of the busy, crowded cities of the Orient is pictured on their pages. We see with him the great rivers with hundreds upon hundreds of vessels plying up and down their length. We see the emperor in his palace, approached on each of its four sides by flights of marble steps, the roof adorned with a variety of colors, red, green, azure, and violet, and enter with Polo the great halls and apartments decorated with

dragons in carved work and gilt, figures of warriors, of birds, and of beasts, with scenes of battles. At a time when our own forefathers considered the poorest of windows a luxury, the glazing of the windows of the Khan's palace was "so well wrought and so delicate as to have the transparency of crystal."

Elephants wander in and out of the picture, the Khan going forth to battle in "a large wooden castle, borne on the backs of four elephants, whose bodies were protected with coverings of thick leather hardened by fire, over which were housings of cloth of gold. The castle contained many cross-bow-men and archers, and on the top of it was hoisted the imperial standard, adorned with pictures of the sun and moon." The Khan has leopards and lynxes with which to hunt deer, and also many lions which "are active in seizing boars, wild oxen and asses, bears, stags, roebucks, and other beasts that are objects of sport." Eagles are trained to catch wolves, and ten thousand falconers gather with their birds for the great hunt which the Khan holds in March of each year.

Nothing escaped the observation of the keen young Venetian. He tells of the taking of a census in a great city, of the kinds of money used in every province, of the way the Khan had shade trees planted along the roads, of the manner in which idols are worshipped, and of the way in which ships are built. The great ruby of Ceylon is described,

"brilliant beyond description, and without a single flaw," for which the Khan offered a city in return if so be that the ruler of Ceylon would part with it. But the king sent back word that he would not sell it for all the treasure of the universe, nor let it go out of his kingdom, for it had been handed down by those who had ruled Ceylon for many generations.

Truly, says Marco Polo at the end of his book, having described the difficulties and hardships of his return journey, "I believe it was God's pleasure that we should get back in order that people might learn about the things that the world contains."

Of Marco Polo, Sir Henry Yule, his greatest biographer, says: "He was the first traveler to trace a route across the whole longitude of Asia, naming and describing kingdom after kingdom which he had seen with his own eyes . . . the first traveler to reveal China in all its wealth and vastness . . . the first to tell of the nations on its borders, of Tibet, of Burma, of Laos, of Siam, of Cochin-China, of Japan, and the first to speak of the Indian Archipelago, of Java, of Sumatra, of Ceylon, of India, of Abyssinia, of Zanzibar, of Madagascar, of Siberia and the Arctic Ocean."

FOUR QUESTIONS ASKED AND ANSWERED

By Prince Henry the Navigator
Columbus
Vasco da Gama
Balboa
Magellan

Did Africa Reach to the South Pole?
Could One Reach the East by Sailing West?
Could One Sail Around Africa to India?
Was the World Really Round?

FOUR QUESTIONS ASKED AND ANSWERED

Did Africa Reach to the South Pole?

PRINCE HENRY'S QUESTION

IF PRINCE HENRY of Portugal had lived in the twentieth century, he would have established a laboratory for building airplanes and a school for training aviators, and then would have stood as financial backer for transoceanic and polar flights. As he lived in the fifteenth century, he did what was just as thrilling in those days. He founded a school of navigation, trained pilots and captains, built astrolabes and other nautical instruments, and sent his men out on long exploring expeditions. His was the most modern of methods. The press of our own day, giving publicity to his undertaking, might announce it as a foundation for navigation, after the fashion of the Rockefeller or Guggenheim foundations, or as a college of seamanship of which he was the founder and president.

Prince Henry had the vision of a statesman and the passion for knowledge of the explorer. A sailor who felt the lure of the sea as he did would have signed up with a captain for the longest voyage he

could undertake. A captain with the exploring fever would have sought out merchants who might use him in their trading plans or a king who would finance his expedition. But Prince Henry was of royal blood himself, being the third son of King John of Portugal and the English Queen Philippa. He took the new way, the way of a king and statesman. He turned his back on the luxurious court of Portugal and journeyed to Cape Sagres, a forlorn spot at the tipmost southern end of the kingdom, where, as the courtiers who followed him into this exile complained, there was nothing to be seen but sea and sky and sand. There he built his palace, which was more like a military barracks than our idea of a palace, and his astronomical observatory, and set up his school. The courtiers might grumble at their isolation, but the prince was not left alone on his sandy promontory. Thither flocked for forty years sailors and sea-captains, travelers and map-makers, young men who were seeking adventure and old men who had dreamed their dreams and came to share them with this man who was the wisest of them all. There is no greater day in the history of exploration than that one when young Prince Henry turned his back on the court and set his face towards that point from which he could look southward across the seas towards Africa and westward towards the ocean beyond which lay the great unknown continents of the Americas.

There, as he gazed southward, he asked of himself and the men who worked with him the question uppermost in his mind: "Did Africa reach to the South Pole?"

As a boy he had been taught that it did. Or if there was no South Pole, for men were not sure whether the world was round or flat, did it end in a boiling ocean which no man could cross, an ocean where dwelt strange sea monsters and fabulous creatures? Any sailor venturing there, so the stories went, would be boiled alive, or his skin would be turned as black as charcoal. Prince Henry doubted these stories. So he set to work to find out the truth.

Why did Prince Henry care whether Africa reached to the South Pole or not? He cared because he was a prince of Portugal. If there was a chance of sailing around the tip of Africa, one might discover on the far side a water route to India; and a sea route to India was what the people of Portugal and western Europe desired more than anything else in the world.

There had been centuries when they had not cared. Why venture out on unknown waters when land routes were open? The caravan trails to India and the Far East were long and toilsome, but at least they were well-worn and as safe as any such roads through uncivilized regions could be. But those routes, which had been open for trade and

travel since the days of Solomon and the Queen of Sheba, were suddenly closed to the people of Europe. The Moors, or Moslems, as some called them, had conquered all the region which lay between the Mediterranean Sea and the East, and had shut the routes of travel against Christian traders.

The people of Europe could still season their dishes with spices from Ceylon and wear silks from China if they could afford them. But they must buy these luxuries from merchants of the seaports, who purchased them in their turn from Moslem traders at the Mediterranean end of the great caravan routes. There was no longer any direct dealing with India. For a hundred years or so it had been as if a black curtain had been dropped between the two great civilizations. This was why Prince Henry studied the maps and charts which his brother, Pedro the Traveler, brought him from Venice, the home of the great Marco Polo, and questioned every sailor who had been beyond the Pillars of Hercules.

Prince Henry had been into the interior of Africa. He had won great glory when as a lad of twenty he had gone thither fighting for his father, King John, who had been bent on driving the Moors out of North Africa. Ever since that campaign, kings had been bidding for his services to aid them in their pet projects, for he had shown himself a

natural leader of men. But the prince had other plans for himself and his life. The men whom he sought to inspire and lead were those who sailed the seas. They were the ones who could further his plans of exploration and trade and Christian conquest.

There are quaint tales which come to us of the sailors whom the prince coaxed to sail around the dreaded Cape Bojador on the western coast of Africa, beyond which lay the dread "Sea of Darkness."[2] Ship after ship went out, each going a little farther than the last, until finally a brave captain rounded this cape and came back to say that the sea beyond "was as easy to sail in as any at home." But there were many expeditions before they got much farther.

One story tells of a young captain who was so "unformed in age" that the prince laid on him only the lightest of commands, to bring back skins and oil. But when the young man had performed the voyage that had been set for him, he called to him "another stripling and the men of his ship, who were in all twenty-one, and said to them: 'Brothers and friends, it seems to me to be shame to turn back to our lord's presence with so little service done. Just as we have received the less strict orders, so much more ought we to try with the greater zeal. And how noble an action would it be if we . . . should be the first to bring a native prisoner before

the presence of our lord." To this the crew agreed joyfully. So they set out to catch a native African to take back home to their lord and prince.

Slaves and gold dust soon attracted the attention of the Portuguese to these expeditions of Prince Henry's. But while the nobles and merchants gathered at the slave market to get the best bargain they could in cheap labor, the prince, it was said, walked among them with the bearing of one who cared little for gathering in wealth. Once and again he was known to give away his share of the spoil from these voyages, since his reward "was chiefly in the success of his great wishes." He looked on the natives "with unspeakable pleasure as to the saving of their souls, which but for him would have been forever lost," for Prince Henry was a good churchman and as strong in his desire to convert the people of these lands as to find out the geography of the lands where they lived.

For forty-five years Prince Henry gave himself to the business of exploration. He did not live to see the full results of his labors. During his lifetime his captains journeyed nearly two thousand miles south of the point which had been the limit of the known world when he set up his school. They rounded Cape Verde, thus covering more than half the water route to India. They explored inland rivers and opened up the whole province of Guinea and the Cape Verde Islands.

But what happened in Prince Henry's lifetime is no measure of the result of his work. It was in the carrying out of his plans that Diaz rounded a few years later the "Stormy Cape" (which King John the Second promptly and joyfully rechristened the "Cape of Good Hope," since beyond it lay the possibility of the long-sought sea route to India) and that Vasco da Gama fulfilled that hope by finding out the route. Most of the great seamen of the next fifty years were either brought up from boyhood in his household or looked to the school which he had established and the men whom he had trained for information and inspiration in their famous voyages. "It was in Portugal," writes Ferdinand Columbus in his life of his father, "that the Admiral began to think that if men could sail so far south, one might also sail west and find lands in that quarter."

Could One Reach the East by Sailing West?

CHRISTOPHER COLUMBUS' ANSWER

1492

Some questions are asked and answered only on paper. Toscanelli, astronomer and chart-maker of Florence, Italy, asked this question, and answered it by maps with a line of islands which began somewhere in the middle of the Atlantic and stretched thereafter as stepping-stones arranged

at neat intervals up to the very door of the kingdom of Cathay. To be sure, there were no such islands there, but instead the wall of the great continents of the Americas and of the waters of the vast Pacific, of which Toscanelli had never dreamed. But the very sight of those islands on the map must have done much to encourage would-be explorers, and timid kings and queens, in their dreams of exploration and discovered treasures. Toscanelli wrote to the king of Portugal, saying: "You must not be surprised if I call those parts where the spices are west, when they usually call them east, because by those always sailing west, those parts are found by navigation on the underside of the earth. But if by land and the upper side, they will always be found to the east."

Whether Columbus saw the Toscanelli map or read the Toscanelli letter to the king of Portugal, or not, is a matter of dispute among historians. Very likely he did. But whether he did or not, he dreamed his dreams. Himself an experienced sailor, map-maker, student of navigation, and adventurer, he had as good a right as any to think that Cathay could be reached by sailing westward over the Atlantic.

But to believe that the land of Marco Polo's Great Khan could be reached across the Atlantic was one thing; to convince others of that belief was another. Columbus was a poor man. He could

not pay the expense of a voyage of exploration. And kings and queens were hard to convince. The question had been answered only on paper. It must be answered by action, by actual exploration.

I

We who meet explorers only at the great moments of their careers can pass over the long years during which Columbus traveled from court to court of Europe, spreading his charts before kings and queens, astronomers and geographers, only to meet discouragement. We see him lingering longest at the Spanish court of King Ferdinand and Queen Isabella, for there the fair young queen showed more sympathy than did the others and seemed by her interest and intelligent questioning more likely to further his quest. But that hope, too, had failed. Even the letters of his friends had not convinced her, especially in face of Columbus' bold demands that he be made High Admiral of the fleet in which he should set sail, and Viceroy of all the islands, seas, and countries discovered, and be given besides one tenth of all the precious metals found in the new lands. That was preposterous. King Ferdinand and Queen Isabella threw up the whole affair. They were done with this sailor and his schemes.

So Columbus, in January, 1492, left the court in high indignation and set out on his mule to ride

across the border into France. We can imagine with what thoughts of discouragement he plodded along on his slow way. Seven years and more he had been carrying his precious charts from one place to another and telling to any who would hear his precious plans. Some of his listeners laughed at him because he thought the world was round; others put him off till wars should be over; others scoffed at his demands for overlordship and wealth in the lands he might find. The world must have seemed a very dark and discouraging place as he rode along the highway.

But as he rode across a bridge he heard behind him the hoof-beats of a swift horse. One of the queen's courtiers had caught up with him, riding an Arab horse swiftly over the six miles which Columbus had covered so slowly. He had come to fetch him back to court. The learned men at the court had been disturbed when the king and queen had dismissed Columbus, for they believed in his scheme. They had persuaded Queen Isabella to back the expedition with her own money, selling her jewels if need be, and the messenger had been sent to overtake the sailor and bring him back.

Right joyfully did he wheel his mule around and make his way back. Within a few days an agreement was signed by which his expedition was to be financed and he was to be in charge. With a letter to the Great Khan of Marco Polo's report, he de-

parted for the sea coast to prepare his vessels. His great moment of opportunity had come.

II

The story of the voyage is told in Columbus' journal of which we have a summary and abstract made by his companion Las Casas. The opening is a dedication to the king and queen after the lengthy fashion of the times:

> Whereas . . . in consequence of the information which I had given your Highnesses respecting the countries of India and of a Prince, called Great Khan, which in our language signified "King of Kings," how at many times he and his predecessors had sent to Rome soliciting instructors who might teach him our holy faith, and the Holy Father had never granted his request . . . your Highnesses determined to send me, Christopher Columbus, to the above-mentioned countries of India, Cathay . . . and furthermore directed that *I should not proceed by land to the East, as is customary, but by a Westerly route*, in which direction we have hitherto no certain evidence that any one has gone. . . . I set sail from the port [Palos] on Friday, the third of August, half an hour before sunrise.

Day by day the story of the voyage is given in simple sailor language. The captain admits that he deceived his crews as to the distance traversed in each twenty-four hours, fearing their discouragement if they knew how far from home they were getting. Winds were against them. The crews urged their leader to turn back. And still his word was "Sail on!"

At last, on the eleventh day of October, many signs appeared indicating that land was near.

After sunset they steered their original course west and sailed twelve miles an hour till two hours after midnight, going ninety miles, which are twenty-two leagues and a half; and as the *Pinta* was the swiftest and kept ahead of the Admiral, she discovered land and made the signals which had been ordered. . . . They took in sail and remained under the square-sail lying to till day, which was Friday, when they found themselves near a small island. . . . Presently they descried people, naked, and the Admiral landed in the boat, which was armed, along with Martin Alonzo Pinzon, and Vincent Yanez his brother, captain of the *Niña*. The Admiral bore the royal standard, and the two captains each a banner of the Green Cross. . . . This contained the initials of the names of the King and Queen on each side of the cross, and a crown over each letter. Arrived on shore, they saw trees very green, and diverse sorts of fruits.

They had landed on the shores of a New World. The Admiral called on the two captains and the rest of the crew and also the notary of the fleet to bear witness that he took possession of that island for the King and Queen, his sovereigns.

Numbers of people of the island shortly gathered together.

"As I saw," writes Columbus, "that they were very friendly to us, and perceived that they could be much more easily converted to our holy faith by gentle means than by force, I presented them with some red caps, and strings of beads to wear upon the neck, and many other trifles of small value,

wherewith they were much delighted, and became wonderfully attached to us."

Such is the simple record of that first landing, which we celebrate each year as one of the great days of history. Columbus never knew that he had discovered a continent. He went to his death thinking that the islands on which he first landed were next door to the fabled land of Cathay which he had set out to reach. But what matter? His was the great feat of exploration. The business of occupation of the land was to be carried on by his successors.

Could One Sail Around Africa to India?

VASCO DA GAMA'S ANSWER

Columbus had failed to reach India. For that the king of Portugal might give thanks, since Columbus had sailed under the flag of Spain, having been refused support at the Portuguese court. Now all Spain was rejoicing in the great Admiral's successes, though they had been slow enough to accord him honor at first.

But he had not reached India. These lands with savages of which he told might be the borders of Cathay. They might bring him by some roundabout means to the sought-for East. But the thing had not yet been accomplished. In the race for a sea route to India, Portugal still had a chance, and she must

needs take advantage of it quickly, for wars with Spain had emptied her coffers and her very existence was threatened unless her trade could be bettered.

So King John the Second, father of Prince Henry the Navigator, realized. Old and feeble as he was, he set about building three ships to send over the route which Diaz had taken ten years before, hoping that beyond the Cape they would find India. But before the vessels were finished, King John died. It looked as though the race for India was once more set back. But no! his successor, young King Manuel, was even more eager than King John to bring wealth and fame to his nation by this means. He had the vessels finished, engaged sailors to man them, loaded supplies in the holds, and then waited to choose a leader for his expedition. In spite of the dangers of the voyage many wished to go. But the young king put them off. He had not yet made up his mind. He had not seen the man whom he wished to put in charge of the great adventure.

Which moment in Vasco Da Gama's life shall we choose as the greatest? Some might choose that moment when he walked across the great court of the royal palace and King Manuel looked up from poring over maps and charts to watch his proud bearing and his manly, self-confident air.

"I have found my man," exclaimed the king, and sent a man to summon the young cavalier to

the conference at which he offered him the leadership of the expedition.

Others might choose that fifth of July in the year 1497, shortly after this momentous conference, when he and his brother Paulo set sail amid the plaudits of all Lisbon for that perilous voyage on which all Portugal had set its hopes. A glad moment, if not a great one, must have been that one when after voyaging for ninety-six days without sight of that land, until his men were disheartened to the point of terror and mutiny, the captain caught sight of land ahead and pulled into a safe harbor on the coast of Africa.

Da Gama's greatest moment in the history of exploration was probably that one in May, 1498, when he landed on the shores of Calicut, India, the first European to have brought a vessel into any port of India or the Far East.

For myself, however, I choose not the moment when the vessels set forth, sturdy and new, with fluttering banners, but that one two years and two days later when they came limping back, with their mission accomplished, to Lisbon.

The brave commander was in mourning, for he had recently lost his brother, fellow-commander by his wish on the expedition. Many of his men had died under the hardships of that terrible voyage. The sails of his vessels were worn and tattered; his ships were so wracked and battered as to be barely

seaworthy. He himself was no longer the gay and debonair young cavalier who had strode across the palace court and attracted the king's notice by his proud bearing. His shoulders were bowed, and his face was tanned by exposure and furrowed with the marks of hardship and grief. Yet every mark on the man and on his ships bore witness to the greatness of the victory which he had wrested so hardly from the ocean waves.

He had been sent out to find the sea route to India and he had found it. He had answered the question that had been in the minds of men for more than a hundred years. He was the pathfinder who had marked out the trade route to the East which was to make his country wealthy. By his deed a new link was forged which was to unite the East and the West.

From the Zamourin of Calicut he brought to the king of Portugal the following letter, scratched on a palm leaf with an iron pen:

"Vasco da Gama, a gentleman of your household, came to my country, whereat I was pleased. My country is rich in cinnamon, cloves, ginger, pepper, and precious stones. That which I ask you in exchange is gold, silver, corals, and scarlet cloth."

When the news of Gama's success reached Venice "the whole city felt it greatly," writes an Italian chronicler, "and remained stupefied, and the wisest held it as the worst news that had ever arrived."

Well might the merchants of Venice mourn, for the opening of this new trade route to the East was to shift commerce from the narrow bounds of the Mediterranean to the wider reaches of the Atlantic.

When the first Portuguese sailor from Gama's fleet had landed on the shore of Calicut, an Arab had met him and exclaimed:

"The devil take you! what has brought you here?"

"Christians and spices," retorted the Portuguese sailor.

He was right. In those words he summed up the aim and end of the search for the sea route to India. Christians and spices were to travel along that path for many a long year to come.

BALBOA

1513

Could one reach the East by sailing west? Columbus asked the question but only half answered it.

One could find land by sailing west. Columbus proved that. But was this land the threshold of the Far East of which Marco Polo had written? Columbus thought it was, but the explorers who followed him during the next fifteen or twenty years began to have their doubts. No one could stand, as Balboa

stood, on the shores of a sea that stretched westward as far as the horizon line and feel any confidence that Cathay was next door or could even be reached by a few days' sailing.

Balboa began his great adventure as a stowaway. He could not get away from the Spanish colony of Santo Domingo in any other way, for there was a law forbidding any one who was in debt from leaving the island, and Balboa, though "a gentleman of good family, great parts, liberal education, of a fine person, and in the flower of his age," was desperately in debt. After service in the Moorish wars and a two-year voyage to the New World in 1500, he had settled on a plantation in Santo Domingo to try his hand as a gentleman farmer. But he was no farmer, and the island on which he set himself up with such satisfaction bade fair because of his debts to become his lifelong prison.

That was why the name of Vasco Nunez de Balboa was not on the list of passengers and crew of the vessel on which another explorer, Enciso, sailed out from the port of Santo Domingo for the New World, but the adventurer himself was there, concealed in a bread cask from which he did not emerge until the ship was well on its way westward.

It was a great risk he took. The captain was so angry that he threatened to land him on a desert

island and leave him to starve, a thing which in those rough days he was perfectly capable of doing. But the crew pleaded for "the man of the cask," and before the end of the voyage he was proving his usefulness as guide in regions with which his earlier expedition had made him familiar. Within a few months he was acting governor of the colony which the ship party had founded on the coast of Panama, while his captain, Enciso, was journeying to the court of Spain to stir up trouble for the stowaway who had ousted him from his place as leader.

They were a wild lot, these "conquistadors" of Spain, full of plots and plans and enmities. Balboa was destined to be put to death a few years later, at the behest of one of his political rivals, in the public square of the colony of which he was now governor. Even on this journey across the Isthmus he set out, so far as can be judged, because he received word that his enemies had prevailed at the Spanish court and a warrant for his arrest was coming on the next boat. The one way back to royal favor was to make some great discovery. So Balboa slipped away to see if the tales of the natives were true and there was an ocean on the other side of the jungle which stretched inland from the little Spanish colony.

It was the worst time of the year to go, for the wet season was barely over. Balboa could secure less than two hundred men, and the Indians had

told him he needed at least a thousand, if he was to make the rough journey and hold his own against hostile tribes of the interior. But with the warrant for his arrest due on the next boat Balboa could not wait. One wonders if he would have waited anyway. The lure of that Indian tale of an ocean over yonder was too great to be long resisted.

On September 1, 1513, he set out to make the great adventure, taking with him one hundred and ninety men. But they were picked men, who had seen four years' hard service in that fever-ridden district, "men," as the old story has it, "hardened to abide all sorrows, and exceedingly tolerable of labor, heat, hunger and watching." Even so there were only sixty-seven of them who were able three weeks and a half later to attempt the steep climb to the top of the mountain from which the natives had told them they would see water. They had had a frightful journey through the jungle and over the rough mountain-sides, and had engaged in several conflicts with hostile Indian tribes. But Balboa was undaunted. Nothing could have stopped him from ascending that peak.

There are some great moments in history which have been so well described by a master hand that no lesser touch should mar that perfection. Such is the description of the first sight of the Pacific as Washington Irving wrote it from the old Spanish chronicles one hundred years ago.

"The day had scarce dawned when Vasco Nunez and his followers set forth from the Indian village and began to climb the height. It was a severe and rugged toil for men so wayworn, but they were filled with new ardor at the idea of the triumphant scene that was so soon to repay them for all their hardships.

"About ten o'clock in the morning they emerged from the thick forests through which they had hitherto struggled, and arrived at a lofty and airy region of the mountain. The bald summit alone remained to be ascended, and their guides pointed to a moderate eminence from which they said the southern sea was visible.

"Upon this Vasco Nunez commanded his followers to halt; no man should stir from his place. Then, with a palpitating heart, he ascended alone the bare mountain top. On reaching the summit the long-desired prospect burst upon his view. It was as if a new world were unfolded to him, separated from all hitherto known by this mighty barrier of mountains. Below him extended a vast chaos of rock and forest, and green savannahs and wandering streams, while at a distance the waters of the promised ocean glittered in the morning sun.

"At this glorious prospect Vasco Nunez sank upon his knees and poured out thanks to God for being the first European to whom it was given to make that great discovery. He then called his

people to ascend: 'Behold my friends,' said he, 'that glorious sight which we have so much desired. Let us give thanks to God that he has granted us this great honor and advantage. Let us pray to him to guide and aid us to conquer the sea and land which we have discovered, and which Christian has never entered to preach the holy doctrine of the Evangelists. As to yourselves, be as you have hitherto been, faithful and true to me, and by the favor of Christ you will become the richest Spaniards that have come to the Indies. You will render the greatest services to your king that ever vassal rendered to his lord; and you will have the eternal glory and advantage of all that is here discovered, conquered, and converted to our holy Catholic faith.'

"The Spaniards answered this speech by embracing Vasco Nunez and promising to follow him to death. Among them was a priest, named Andres de Vara, who lifted up his voice and chanted *Te Deum Laudamus*—the usual anthem of Spanish discoverers. The rest, kneeling down, joined in the strain with pious enthusiasm and tears of joy. . . . It was indeed one of the most sublime discoveries that had yet been made in the New World.

"Vasco Nunez called upon all present to witness that he took possession of that sea, its islands and surrounding lands, in the name of the sovereigns of Castile, and the notary of the expedition made a

testimonial of the same, to which all present, to the number of sixty-seven men, signed their names. He then caused a fair and tall tree to be cut down and wrought into a cross which was elevated on the spot from whence he had first beheld the sea. A mound of stones was likewise piled up to serve as a monument, and the names of the Castilian sovereigns were carved on the neighboring trees. . . . Having taken possession of the Pacific Ocean and all its realms from the summit of the mountain, Vasco Nunez now descended with his little band, to seek the regions of reputed wealth upon its shores."

Never did a Spanish explorer play his part more perfectly. There are great moments in science, in history, and even in exploration which slipped by hardly noted by those who shared in them, only to stand out in later years as episodes of tremendous importance. But the Spaniards never failed to appreciate and celebrate their triumphs as they went along.

Balboa and his men had to fight with hostile Indians on their way down from the mountain top but they came out after three days' journey on the sandy shores of the Pacific. The tide was out when they arrived. With true Spanish dignity Balboa waited for the water to come rushing in. Then he rose, took up a banner, and drawing up his sword and throwing his buckler over his shoulder to keep them from getting wet, he marched into the sea

until the water reached well above his knees. Waving his banner before his admiring followers, he took possession of the entire sea and all adjoining lands, loudly proclaiming himself "ready and prepared to maintain and defend them . . . both now and in all times, as long as the world endures, and into the final day of judgment, of all mankind." Once more the notary drew up a document for the occasion which they all signed.

"This done," says Washington Irving, "they advanced to the margin of the sea, and stooping down tasted its waters. When they found that though severed by intervening mountains and continents, they were salt like the seas of the North, they felt assured that they had indeed discovered an ocean, and again returned thanks to God."

The whispering wind took up the words of these ceremonies and carried them out to sea, but there was no radio receiver on the shores of China, Japan, the Philippines, the South Sea Islands, and all the other lands encircling the Pacific to take them up and translate them to any listening ear. Only in this twentieth century are the peoples of the Pacific beginning to come together. To-day representatives of the nations bordering on that ocean are sitting down together in conference to discuss their common problems. The waters that seemed for so many centuries to separate them are now seen as a bond which unites them.

CHRISTOPHER COLUMBUS LANDING IN A NEW WORLD

Columbus tried "gentle means" in conquering the natives and "presented them with red caps and strings of beads"

War Canoe of the Solomon Islands

Magellan braved the terrors of three months' voyaging across the Pacific—then met his death at the hands of natives

MAGELLAN

1520

We know a thing—so we are told—only when we experience it. Ferdinand Magellan and his men experienced the Pacific Ocean.

Balboa and his followers had looked at it, bathed in it, and claimed it as their own. Magellan and his crews sailed their three little ships across it for ninety-eight successive days before they found a place on which to land. Day after day, week after week, they looked out on its apparently endless waters until they gave up hope of ever seeing land again. "A sea so vast that the human mind can scarcely grasp it," writes one of the voyagers in his account of the expedition, and he knew whereof he spoke.

They had come out from Spain, five shiploads of them, under the patronage of young King Charles, then not twenty years of age, whom Magellan had fired with enthusiasm for his project of discovering a cape at the southern tip of South America, as earlier navigators had discovered the Cape of Good Hope at the point of Africa, of rounding that cape when it had been discovered, and coming by that means to the rich Spice Islands, which were then the goal of trade. Almost more than for gold the people of Europe longed for spices, cloves, cinnamon, peppers, and the like, with which to flavor

and make palatable their meats and other foods. We who live in the days of scientific food preservation and cooking can hardly appreciate the eagerness of the men of the Middle Ages for spices and seasonings with which to cover their half-spoiled meat and underdone or overdone foods. The ships that sailed into European ports with their holds full of spices were sure of the warmest of welcomes, and their owners' fortunes were made.

So Magellan set out to find the new way to the Spice Islands, and it was written in the contract that no other explorer would be given permission to depart from Spanish ports on this errand for at least ten years, except by royal permission, which meant that the captain-general was safe from rivals.

The voyagers had no easy run across the Atlantic. "The upper air burst into life," writes the chronicler, and for two months they battled their way through storms. Their food ran short, and mutiny broke out among the men. But their leader was not to be dismayed.

"Be they false men or true, I fear them not," he said. "I will do my appointed work."

It was more than a year before they discovered the straits through which they were to sail to the Pacific, the straits that now bear Magellan's name. Three of Magellan's captains had turned at one time against him, so that he held only two ships against the three of which they had possession.

But again Magellan's firmness won the day. Mutiny could not stop him. Before they sailed through the straits one of the ships had run aground and been wrecked, and one, under a disloyal leader, had "stolen away privily and returned to Spain." All the men begged again and again to be taken home. But Magellan never wavered. "If I have to eat the leather of the ships' yards," he said, "yet will I go on and do my work."

For thirty-eight days they made their dangerous way through the winding straits, the navigation of which was, according to Hildebrand,* a marvelous achievement. In his life of Magellan he says: "In all the years since 1520, the passage from Cape Virgins to the Pacific entrance, even by smart and able fore-and-afters, has rarely been attempted. And Magellan's ships were square-riggers, and of a type absolutely at its worst under these conditions. Indeed, Magellan Strait is the end of the earth. No portion of the world frequented by man has worse weather; there is no fine season, and winter and summer alike, snow, hail, rain, and wind are absent only for very brief periods. . . . Bold coasts, of a complexity utterly unknown elsewhere; passages so narrow that a lee shore is never more than five miles away, and is generally much nearer; water so deep that it is impossible to anchor, except too

*"Magellan," by Arthur Sturges Hildebrand, Harcourt, Brace and Company.

close to the shore for safety; sudden and violent squalls in which no ship is manageable and which no canvas can endure; an atmosphere too thick for visibility; submerged rocks and heavy overfalls and whirlpool currents—and, for these ships, no charts, no courses, no basis of experience." But Magellan brought them through. "Follow the flagship and ask no questions," had been the orders he gave when he took command of the little fleet in Spain. Following the flagship they sailed on the 28th of November, 1520, round the "longed-for cape," as they named it, into the waters of the South Pacific.

Such, however, had been only the weary prelude to the hardest part of their voyage, the ninety-eight days of sailing across the waters of the Pacific. Of the horrors of that voyage, the accounts written by the ships' chroniclers paint a vivid picture. Fortunately there were during that period no storms. If there had been, the ships would never have reached port, for the men were so weakened during the last six weeks of the voyage by starvation and scurvy that they could barely drag themselves about the decks. Giving thanks for the freedom from storms, which was in such contrast to their experience on the Atlantic, they named the ocean, the Pacific; but for nothing else could they give thanks. Their food gave out, so that they had to do what Magellan had dramatically set as

the limit of utter starvation—eat the leather from the ships' yards. They cut up planks and ate the sawdust powdered from small pieces. Their water was yellow and unhealthful. Life could not have lasted much longer under such conditions.

On the twenty-fourth of January, 1521, they sighted land, but it proved to be only a tiny island with trees on it, uninhabited, with no good anchorage. They sailed wearily on, but the sight of even that bit of land had given some cheer. Two weeks later they sighted another island. It proved to be as bare as the first. But on the sixth of March they approached islands from which native boats came out to meet them. This was the group of islands known in later times as the Ladrones. Their visit here was short, for they met no cordial welcome, but at least they found "figs a foot long," which we recognize as bananas, coconuts, sugar-cane, dried fish, and—joy of joys—a pig. Fortified by food and fresh water they sailed on, and seven days later sighted the Philippines, being the first white men ever to look upon these islands.

The story of their visits to one island after another is told in detail in the records of the voyage. Magellan came into friendly relations with many of the native leaders, and all seemed at first to be going well. But in an unfortunate skirmish in which the Spaniards became involved with members of a hostile tribe, the brave Magellan

was killed, to be buried in a far-off island of the ocean which he had been first to traverse.

He had done a wonderful work. Until his voyage no one had had any idea of the size of the globe, for the extent of the Pacific Ocean had never been imagined. He enlarged the thought of the people of his time as to the size of the world by all the weary days of his journeying, and proved by the voyage which he did not live to complete that it was a globe around which one could sail. "He died," writes the chronicler Pigafetta, "but I trust your Illustrious Highness [to whom the book was dedicated] will not permit his memory to be lost, the more so since I see born again in you the good qualities of so great a captain, one of his leading virtues being his constancy in the worst misfortune. At sea he endured hunger better than we. Greatly learned in nautical charts, he knew more of the true art of navigation than any other person, in sure proof whereof is the wisdom and intrepidity with which—no example having been afforded him—he attempted and almost completed the circumnavigation of the globe."

The homeward journey of the sorrowing members of the fleet was carried through, as the outward journey had been, amid incredible hardship. They could not go back. There was nothing to do but go on. Two vessels remained, with one hundred

and fifteen men. In November they reached the Spice Islands (the Moluccas). They had achieved the goal of their expedition, coming to these islands by a westward instead of the more familiar eastern route. They loaded their vessels with cloves and were preparing for the homeward voyage when one of the two ships was found to be leaking so badly that she had to be laid up for long repairs. So the *Victoria* set out alone for Spain. It was three months and more before the Cape of Good Hope was sighted. The Cape Verde Islands were reached in July, and in September, 1522, three years after they had set forth, eighteen men who had circumnavigated the globe reached Seville. To the leader of the surviving company was given as a coat of arms to be used in his family for all time, a globe bearing the words *Primus circumdedisti me*—"You first sailed around me."

CONQUERORS AND COLONISTS

Cortez and Montezuma
Pizarro and Peru
Henry Hudson and the "Half-Moon"
Champlain, Explorer
The "Mayflower" Compact

CONQUERORS AND COLONISTS

Cortez and Montezuma

1519

GOLD! gold! gold! that was all that was talked of in Cuba in the year 1518, for a Spanish expedition sailing across to the newly discovered province of Yucatan in South America had brought back, in exchange for a paltry lot of glass beads, pins, and scissors, a pile of gold ornaments and jewels valued by those who knew the worth of such treasure at a quarter of a million dollars or the equivalent in Spanish money.

Hernando Cortez, the dashing young adventurer who was the next to go across to the mainland, was so eager to get away and so afraid that some one else would be before him that he sold all his own possessions and borrowed everything he could lay hands on for money to equip his expedition, and then slipped away secretly lest he be stopped by jealous rivals. If the race for gold was for the swiftest and the most daring, he was determined to be first.

Eleven ships made up his little fleet. On board were one hundred and nine sailors, five hundred and eight soldiers, fourteen cannon, and sixteen

horses. This was no mere voyage of exploration for the sake of geographical knowledge. The days of lone adventurers who sailed out toward the west with a handful of sailors to man their ships was past. The New World had been located. Hitherto it had seemed to have only naked savages as its inhabitants. But now it had shown signs of treasure, and its inhabitants had told of a king who dwelt far inland and lived in gorgeous state, eating from dishes of gold. Was this the long-sought Great Khan? Anyway, there was the gold, for that had been seen and handled by more than one Spaniard. The time had come for the explorer to be conqueror and colonist as well. When, on the shores of the New World, his followers complained and threatened to turn back, Cortez had his ships fired and sunk. It was the stern answer of the master leader. He had come to adventure in unknown lands. They had chosen to come with him. They must go on. With no ships in which to return, there was no chance but to advance.

It was in such a mood that Cortez made his way up the coast, friendly with the natives so long as they met him in friendly fashion, but ready to fight whenever they showed the least sign of resistance. Such was the purpose in his heart when he finally dropped anchor in the harbor of what is now the city of Vera Cruz (The True Cross), where he had been for but half an hour when two boat-loads

of Aztecs pushed out from the shore to greet him in the name of their emperor Montezuma and inquire the purpose of his visit.

To Montezuma, head of the Aztec peoples, there had come in his wealthy capital city in the heart of Mexico the story of the progress up the distant eastern coast of this fleet of vessels. Pictured cloths had been sent across the jungle showing vividly, as no written letters of a later day could have done, the great water-houses, winged like birds, yet floating always on the water, which were making their way up the coast, and the men with white skins and bearded faces who dwelt in these houses. Nor had the local artists failed to sketch the curious four-legged animals on which the leaders rode when they came ashore, nor the weapons from which issued smoke and death. Twice before within a few years ships like these had been sighted from the eastern coast and had disappeared over the waters on which they came. Now they appeared in greater numbers. Montezuma awaited them in great perplexity.

Long, long ago, as the story had been told by priests and kings for generations, there had dwelt among the Mexicans a kindly god, Quetzalcohuatl, who had a white skin and wore a long beard. He had started the people on the road to progress and prosperity. He had taught them the peaceful arts

of farming and building; he had trained their young men in crafts with metals and precious stones; he had given them their sacred calendar; and, above all, he had forbidden war and set the people in the paths of justice and peace. When he had taught them all that they could learn, the gentle-faced god had gone away, back to his home in the Land of the Rising Sun, but he had promised that some day he or his descendants would return to reward with praise all who had followed his teaching and to punish those who had departed from it.

Long they had waited, handing the prophecy down from father to son and from priest to priest. Now the pictured cloth, which the Aztec runners brought across the mountains and along the jungle paths, showed bearded men with white skins arriving from the Land of the Rising Sun. They came in white-winged water-houses, and their ways were the ways of men who ruled their world. Was the kindly god come back, with his following, to demand his rights and rule over the people in Montezuma's stead? Or were these mere men like themselves, come to fight and conquer, if they could, the proud empire of the Aztecs as it stretched from sea to sea?

If these were enemies, the Mexicans would resist to the last drop of their blood. If they were their rightful rulers, what fate would befall those bold souls who made the mistake of daring to stand up

against the gods? So Montezuma and his counselors, governors of the provinces of the empire, reasoned, and they sent an embassy to greet the white strangers when they should land in their domain.

Cortez received the ambassadors with Spanish courtesy and listened to their inquiries. He had come, he explained, from Charles, the king of Spain, who was the greatest ruler in the world. Hearing of the prince who ruled over their wonderful country, the king had desired to greet him and had sent Captain Cortez with messages.

The ambassadors produced gifts, chickens and vegetables which were more than welcome for the little army of men encamped on the shore, and then a chest filled with beautiful articles of gold, on which the Spaniards looked with eager eyes, and yards upon yards of white cloth wonderfully wrought with feathers. Cortez accepted the gifts graciously and delivered presents in return, beads and an armchair beautifully carved and inlaid, and a crimson cap with a gold medal.

"In this chair, sent as a mark of friendship by the king of Spain, the great prince, Montezuma, will sit when I go to talk to him," he said, hinting broadly at his intention to visit the monarch, "and he shall wear this cap."

The Aztecs were not to be outdone in either

courtesy or diplomacy. Theirs was too great a ruler to be summoned in this fashion. They said that they would take the gifts and report to Montezuma the message of King Charles. Cortez noted the independence of their words. Before they left he arranged a little display of his power. The cannon were fired, and the horsemen with levelled spears galloped on their steeds up and down the hard beach. The ambassadors were startled and impressed, particularly by the balls of fire that burst in the trees, far from the machine that had sent them out with the noise of thunder.

As the soldiers stood at attention, one of the envoys, himself governor of a great province, noticed a gilded helmet worn by a soldier. He remarked that Montezuma would like to see such a helmet, for it resembled one worn by a god who had visited them many hundreds of years ago, which the priests still preserved in their chief temple.

"Take it for him to see," replied the shrewd Cortez, "and bring it back to me filled with grains of gold. Then I will send it to the king of my land, who will like to see whether the gold in your country is like that which is found by the rivers of Spain."

When the envoys returned, Montezuma summoned a council of the governors of his provinces.

CAPTURE OF THE CITY OF MEXICO BY CORTEZ

The Spanish conquest of Mexico, begun in such a gracious fashion by Cortez and Montezuma, became a sorry tale of conflict

THE GOOD SHIP "MAYFLOWER"

In the cabin of this famous vessel the Mayflower Compact was signed to insure the "libertie" of the new colonists

"Shall we let these strangers into Mexico or shall we not?" he asked them, and they argued the question back and forth.

"Keep them out," said one of the leaders, with an all too great gift of prophecy, "for you should never let into your house a man that may push you out of it."

"Let them in," said another, "for it would seem like fear on your part for so great a ruler as you to forbid their coming, when we and our forces are ready to meet them if they prove to be enemies."

Montezuma listened, and his perplexity was not lessened. He took the gilt helmet and compared it with the one in the temple. They were much alike. In his heart he felt that the white gods had returned to take over his kingdom and rule it. But he covered his fear with courteous words and deeds. The helmet went back full of grains of gold, sure proof to the Spaniards of the rich mines contained within the empire. A wheel of gold as big as a cart-wheel, to represent the sun, a larger wheel of silver, twenty gold ducks, and a host of other beautiful articles were carried by the embassy. Montezuma entertained the childish hope that if he sent very precious gifts the strangers would be satisfied to take them and go away.

His message was in the same strain. He was delighted that such valiant men had come to visit his kingdom. He sent back by them to their king

these gifts. He should like to greet them in person, but he could not leave his capital, and the roads were too bad for the Spaniards to make the long journey to his court. So he had given orders for them to be well cared for during their stay, and he must give up the hope of meeting their leader face to face.

There is nothing more pathetic in history than the tale of the exchange of messages between Cortez and Montezuma. On the one hand is the ambition and determination of Cortez; on the other, the mingled pride and fear of the Aztec ruler.

The interchange went on for some time, but at last Cortez started for the capital of Mexico. His journey was not made easy by the governors through whose provinces he must pass. There was more or less fighting, and every endeavor was made to turn him from his purpose. But he persisted, marveling, as he drew nearer to the capital, at the wealth and beauty of this empire of which the people of Europe had never heard. Each city was more beautiful than the last, with spacious stone buildings, temples of rare artistic charm, tropical gardens, and every sign of prosperity and culture.

As Cortez approached, at last, over the causeway which led into the capital he was met by chiefs who gave him every token of welcome. Before he

reached the palace Montezuma himself came out in his imperial litter to greet him. Under a canopy of green feathers, decorated with pearls and precious stones, the emperor came forward, escorted by two lords of Mexico. His attendants spread garments before him on which he should walk and bowed low as he passed.

As the slender, dark-haired ruler came with gentle dignity to greet his Spanish guest, Cortez would have embraced him. But the attendants prevented so presumptuous an act, signalling that the captain stand back while they touched the ground and kissed their hands to him. He did step forward and put a necklace of glass diamonds around the emperor's neck. Then all proceeded to the palace where Montezuma took Cortez by the hand and seated him on a rich dais opposite his own. Gifts were showered upon him, and the Mexican ruler welcomed him as the ambassador of the great lord across the sea in the Land of the Rising Sun, who had gone away so long ago but now sent his men back to his rightful domain.

History tells the story of the Spanish conquest of Mexico, and a sorry tale it is! We who are reading only the annals of exploration need not look beyond this day when Cortez and Montezuma met in such gracious fashion, into that time which was to come all too soon when the Spanish con-

queror was to hold the emperor as his prisoner. Our tale can end with the moment when the men from the Land of the Rising Sun came and looked with amazement on the wonderful civilization which the Aztec race had built upon the American continent. To-day scholars are finding out more and more of its learning, its arts, and its wealth and power. To us, who know the events of all the world almost as soon as they take place, it seems incredible that two such civilizations as those of Europe and South America could exist for hundreds of years, each with no slightest inkling of the existence of the other. Of India and China and the other lands of the Far East travelers and traders had brought back to Europe occasional reports. But of this New World with its advanced culture and prosperity Europe had had no hint. Only in the land of Montezuma there had been treasured the story of the white-faced, bearded god, who had come and gone away and might come again.

Pizarro in Peru

1527

One moment, and one only, in the career of Francisco Pizarro entitles him to a place among the great explorers of the ages. It alone has no trace of the greed, the cruelty, and the treachery which so marred his later conquest of Peru as to make us

almost begrudge him the glory of his geographical discoveries. In it the qualities of the true explorer and the born leader stand out supreme.

It is Prescott, the picturesque and dramatic historian, who has given us the picture of that moment, as it is recorded in the old Spanish chronicles. Pizarro and his companions had spent miserable weeks on an island off the western coast of South America while his partner had gone back to Panama with part of the men for supplies and reinforcements. It was a dozen and more years since the young Pizarro had stood with Balboa on the mountain peak of Panama and caught with him the first sight of this southern ocean; but in all that time no one had found the wonderful cities of which the natives brought vague reports or beheld the mythical king who dressed in cloth of gold and ate off gold plates.

Pizarro and his men had spent two trying years coasting up and down the shores of the great sea. They had endured terrible hardships and privations as well as considerable loss of life at the hands of the Indians. But they had not come yet to the rich inland kingdom of Peru, the temples and palaces of which could—so they were told—be seen even from the water's edge.

Then the vessel went back to Panama for help, and they settled down to endure with such patience as they could muster the long weeks before its pos-

sible return. The rainy season came on, with incessant thunder and heavy tropical downpours. Their clothes rotted on them, and their armor became rusty. Food failed, save for such crabs and shellfish as they could pick up along the shore. Half the men became sick, and the rest bade fair to be, if things went on as they were going.

At last the longed-for vessel came, not with help for the carrying on of the expedition but with orders from the governor to give up the mad project and return. The men, satisfied with their first real meal in months, desired nothing else. Forgotten was the purpose of their voyage. Home, comfort, ease, security—these were all they wanted, and these they could have by boarding the vessel sent for their rescue.

Not so Pizarro. With the vessel had come letters from his partners urging him to hold on a little longer, and they would send him help. But even without these letters one doubts if he had the slightest intention of returning. The chance for his great moment had come, and he rose to it.

"Drawing his sword, he traced a line with it on the sand from east to west. Then, turning towards the south, 'Friends and comrades!' he said, 'on that side are toil, hunger, nakedness, the drenching storm, desertion, and death; on this side, ease and pleasure. There lies Peru with its riches; here,

Panama and its poverty. Choose, each man, what best becomes a brave Castilian. For my part, I go to the south.'

"So saying, he stepped across the line. He was followed by the brave pilot, Ruiz; next by Pedro de Candia. . . . Eleven others successively crossed the line, thus intimating their willingness to abide the fortune of their leader, for good or for evil."

It was seven long months before these fourteen men saw on the horizon line the white sail of the relief vessel, for which they had scanned the waters for every one of the two hundred and more days. "A handful of men, without food, without clothing, almost without arms, without knowledge of the land to which they were bound, with no vessel to transport them, were here left on a lonely rock in the ocean with the avowed purpose of carrying on a crusade against a powerful empire."

Pizarro conquered Peru. With that spirit he could not be stopped. History tells the sorry tale of the method of his conquest, how a people with enormous wealth and a high degree of culture and prosperity were betrayed and robbed by the white men whom they welcomed so courteously and entertained so lavishly. But the heart of the story lies in that moment on the lonely island when fourteen men stepped southward across the line which Pizarro's sword had drawn in the sand.

Henry Hudson and the "Half-Moon"
1609

Henry Hudson set out, as brave English explorers had been doing for half a century, to find the Northwest Passage.

England had awakened to the need of such a passage to the Spice Islands and the other rich lands of the Far East. The Portuguese held the eastern route, round the Cape of Good Hope; the Spanish, the westward, through the Straits of Magellan. England had a single possible route left, by the north. The way would be hard, harder than that by the west or east, for it would be blocked by ice and guarded against the invasion of man by bitter cold and heavy winds. But what true Englishman would be daunted by difficulties? They held, as one explorer had put it, that "there is no land unhabitable, nor sea unnavigable." In that spirit they set forth.

Hudson's voyages into the Arctic regions, where he lost his life in the vain attempt to locate this passage, are full of tragic interest, as were those of the men who preceded and followed him in that enterprise. But while we admire the indomitable spirit of these men who set out to "sail over the North Pole," we can but rejoice that on one of these voyages Hudson followed the coast far enough southward to explore the river that bears his name,

and to carry back to the waiting merchants of England and Holland news of the fair lands that stretched back from it.

It was in the year 1609 that he sailed along the Atlantic seaboard. John Cabot had coasted down this shore, thinking himself on the way to Cipango (Japan) and the land of the Great Khan; but he had found Newfoundland, with its "white bears and large fish," a curious threshold, to say the least, to the tropical land of his desire which should abound in spices and precious stones. Hudson himself had made two earlier voyages across the Atlantic, but had spent all his time in Arctic regions, where he went farther north than any other explorer had been or was to go for another hundred and fifty years. The hardships and disappointments of these voyages would have utterly discouraged a man of lesser courage and persistence from further attempts. But Hudson had been eager to start again.

Now the Dutch East India Company had supplied him with a ship, the *Half-Moon*, and agreed to pay him the equivalent of three hundred and twenty dollars for his personal outfit and the support of his wife and children while he was away, guaranteeing also to his widow, in case he did not return, the princely sum of eighty dollars. After the tales of Cortez and Pizarro, the stipends and rewards of these northern explorers sound as bleak

and unfruitful as the shores of the Arctic lands which they set forth to visit. Hudson, however, was content, and went joyfully forth, sure that this time he would discover the route to fame and fortune. Probably he agreed with Martin Frobisher, who in 1576 had told Queen Elizabeth that the discovery of this passage was "the only thing in the world left undone whereby a notable mind might be made famous and fortunate,"—this before there was a single settlement by white men on the North American continent! But Hudson's fame and fortune were to come by another means than discovering a Northwest Passage.

No one quite knows why Hudson turned south. Perhaps it was the reluctance of his unseasoned and somewhat rebellious crew to endure the hardships of Arctic exploration. Certainly wind and fogs and icy weather had their part, too, in driving him southward. Summer found the *Half-Moon* off the coast of Newfoundland, its crew cheered by catching on the fishing banks "one hundred or two cod" in a single day. From there he coasted slowly southward, scanning the coast eagerly for a wide passage inland.

It was in the late afternoon of September second that he rounded Sandy Hook and sailed into the "great bay" which we know as New York harbor. First contacts of two alien peoples are always in-

teresting. "The people of the country came aboard," Hudson reports, "seeming very glad of our coming, and brought green tobacco. They go in deer skins. They desire clothes and are very civil. They have great store of maize, whereof they make good bread. The country is full of great and tall oaks." Such was the first comment of a man of our own race on the region that was to become the site of our greatest metropolis.

After cruising around the "great bay" for a few days, Hudson sailed up the river, rejoicing to find it so broad, for this gave promise of its being the passage westward of his dreams. But as he went on, it grew narrower. At last, towards the end of September, "they came to an end for shipping to go up." In those words lies the record of his bitter disappointment. Reluctantly they turned back, knowing that they must look farther for a crosscut to the Sea of the South.

But they had only good words for the land they had discovered. "It is as pleasant a land as one need tread upon," reports Hudson, "very abundant in all kinds of timber suitable for ship building and for making large casks or vats. . . . The land is the finest for cultivation that I ever set foot upon in my life, and it also abounds in trees of every description."

Exploration is fascinating in itself, but it is the

exploration that leads to colonization that changes the course of history. The Spanish "conquistadors" were a brave and reckless group, with their passion for gold and their dramatic seizures of kings and countries. But we turn with relief to the simple annals of a man like Henry Hudson, one of the many English and Dutch explorers of the sixteenth and early seventeenth centuries, whose names are built in as corner-stones in the occupation and colonization of our North American continent.

Champlain, Explorer
1603–1635

Samuel de Champlain was a Frenchman, grandson of a fisherman and son of a navy captain. He was familiar with boats from his youth. "Among the most useful and excellent arts," he writes, "navigation has always seemed to me to take the first place. In the measure that it is dangerous and accompanied by wrecks and a thousand perils, by so much is it honorable and lifted above all other arts, being in no wise suitable for those who lack courage and confidence. By this art we acquire knowledge of various lands, countries, and kingdoms. By it we bring home all sorts of riches, by it the idolatry of Paganism is overthrown and Christianity published in all parts of the earth. It is this art that from my childhood has lured me to

love it, and has pricked me to expose myself almost all my life to the rude waves of the ocean."

It is no one discovery that makes Champlain famous. To his credit stands, however, the accurate charting and opening to the world of a vast region. He did, indeed, "expose" himself at all times to the waves of the ocean and the equally difficult rapids and eddies and currents of inland rivers and lakes. "These white men must have fallen from the clouds," said the Indians. "How else could they have reached us through the woods and rapids which even we find it hard to pass?" Yet pass them Champlain did. His maps, surveying hundreds of miles of seacoast and inland waters, are those of a navigator who knew his business. In the thirty years of his voyaging he traveled far. As a young man he sailed to Porto Rico, landed at Vera Cruz, and went on horseback through New Spain to the city of Mexico, at the beauty of which he marveled exceedingly. On his way back he conceived the idea of a canal at Panama, which would "shorten the journey round the Horn by fifteen hundred leagues." In 1603 he made his first voyage to the New World, sailing in the path that Jacques Cartier had followed many years before up the St. Lawrence River to the mouth of the Saguenay. On his next voyage he followed the Atlantic seaboard as far south as Cape Cod, but from that time on his interest centered in the region of Canada and the

Great Lakes. He went as far inland as he could get. He visited Lake Huron, naming it the "Fresh Sea," and went on into Lake Ontario. He traveled far into New York State, and attempted to penetrate beyond the rapids of St. Louis into the heart of Northern Canada.

In his voyaging Champlain did not differ greatly from other explorers. His distinction comes because he was an explorer with a vision. Wherever he went he planned for colonies. On every headland which he considered important, he planted a cross with a French flag, begging the savages to leave it undisturbed until he or his men should come again. He spent the hours of his journeying peopling in his mind every likely spot with trading posts, villages, forts, and towns. Undaunted by the difficulties and dangers which he and his companions experienced, the long, cold winters, the deadly sicknesses, and the adventures with hostile Indians, he could paint in the introduction of his book of voyages a vivid picture of "the pleasure that the French will have when once they are settled in these places; living a sweet, quiet life, with perfect freedom to hunt, fish, and make homes for themselves according to their desires; with occupation for the mind in building, clearing the ground, working gardens, planting them, grafting, making nurseries, planting all kinds of grains, roots, vegetables, salad greens and other potherbs, over as much lands and in as

great quantity as they wish.[22] Written to promote colonization, of course! Yet one feels throughout Champlain's entire narrative his sincere delight in that new and wonderful land, which should be according to his vision a fair New France.

The "Mayflower" Compact
1603

In the cabin of the good ship *Mayflower*, before they landed to found their settlement, forty-one men laid, according to William Bradford, "the first foundation of their government in this place . . . that when they came ashore they would use their own libertie."

These men had come out from England to Holland since they "could not continue in any peaceful condition but were hunted and persecuted on every side—for some were taken and clapped into prison, others had their houses beset and watched night and day, and the most were fain to flee and leave their houses and habitations, and the means of their livelihood. So, seeing themselves thus molested, by a joint consent they resolved to go into the Netherlands, where they heard was Freedom of Religion for all men." They had lived for twelve years in Holland, where the testimony was given of them that "though many of them were poor, yet there was none so poor but if they were known to be of

that congregation, the Dutch (either bakers or others) would trust them in any reasonable matter, when they wanted money. This was because they had found by experience how careful they were to keep their word, and how diligent in their callings. . . . These English have lived amongst us now these twelve years, and yet we never had any suit or accusation come against any of them."

But though the atmosphere of liberty was pleasant to the Pilgrims, they said to themselves, "We live here, but as men in exile, and in a poor condition." Their thoughts turned to "those vast and unpeopled countries of America, which are fit and fruitful for habitation," and they conceived "a great hope and inward zeal of laying some good foundation, or at least to make some way thereunto."

Wise in the ways of government, they did not land unprepared, but set down in a written form to which all signed their names, their purpose, and method of organization:

"We whose names are underwritten, the loyal subjects of our dread sovereign Lord, King James, . . . having undertaken, for the glory of God and advancement of the Christian faith, and honor of our king and country, a voyage to plant the first colony in the Northern parts of Virginia, do by these presents solemnly and mutually in the presence of God, and one of another, covenant and

combine ourselves into a civil body politic, for our better ordering and preservation and furtherance of the ends aforesaid."

With the establishment of civil government the day of the explorer was passing, on the Atlantic seaboard, into the day of the colonist.

IN THE SPIRIT OF ADVENTURE

Drake Sails Around the World
Captain Cook Explores the Pacific

IN THE SPIRIT OF ADVENTURE

Drake Sails Around the World

1577–1580

FRANCIS DRAKE belongs to the period of Queen Elizabeth, as Leif the Lucky belongs to the Viking Age and Lindbergh to the time of radio and the airplane.

It was a time of adventure, of romance. England was alive, intense, keen. A series of exploring voyages had lifted the curtain which had shut the English in as a separate island people. Portugal and Spain had got ahead of her in exploration and were following up their advantage in conquest and trade; but English shipping was not to lag complacently behind. The Cabots were investigating the coast of North America. Sir Walter Raleigh was planting a colony in Virginia. Explorers were seeking the Northwest Passage. Shakespeare was writing. England was alive, and of all Queen Elizabeth's subjects none was more so than that bold adventurer, Francis Drake, who climbed a tree in South America, looked out on the great Sea of the South on which sailed Spanish treasure ships, and resolved to "make a perfect discovery of the same," to the

end that Spain should no longer be able to hold those great waters as her own secret and private possession.

Drake was a pirate. Any Spaniard would have told you so, and there were Englishmen who called him the "Master Thief." For proof one need only halt him in his voyage around the world, uncover the hatches of the *Golden Hind*, and peer in at the gold and silver and precious stones hidden away there. Twenty-six tons of silver, thirteen chests of gold plate, eighty pounds of pure gold, emeralds and pearls in profusion—this was the wealth that had been snatched from the holds of Spanish treasure ships and borne away in triumph. Its presence in the hold was what led Drake to voyage up the coast of the Pacific past California to Alaska, and then, failing to find a northern way homeward to the Atlantic, to turn westward and sail around the world.

Sailing around the world was not undertaken in those days for pleasure or even for fame. There were times when it became for some explorer a stern necessity. Magellan's men had done it because they had no heart to turn back and spend another three months crossing the dreary wastes of the Pacific and then threading their way through the intricate channels of the Straits of Magellan. Drake did it to escape the Spanish fleet, which was on the lookout to recapture his treasure.

A pirate? Yes, Drake started his famous voyage as a pirate. But fortunes change men. A world-encircling voyage proved a sobering experience. It was more than an empty honor which Queen Elizabeth bestowed upon him in the cabin of the *Golden Hind* on his return. The young adventurer who sailed blithely out of Plymouth harbor in the autumn of the year 1577 had become, by rights, in 1581 the Sir Francis Drake of world fame. In those years he had "ploughed a furrow around the world," an English furrow of lasting renown.

Every moment of Drake's life is interesting; almost every moment is exciting. There is not a dull page in his history from the time when he shipped at fifteen as a cabin boy, through his voyage of exploration, to the hour of his knighting, and the years of his service as admiral, when he played his part in the defeat of the Spanish Armada, until he died at sea in 1596, and

> The waves became his winding sheet, the waters were his tomb,
> But for his fame the ocean sea has not sufficient room.

To Americans no part of his career is more picturesque and interesting than the ceremony of his adoption into an Indian tribe of California.

The vastness of the Pacific Ocean, which had worked such hardship on Magellan's crews, proved the salvation of Drake, who turned northward out

of the trade routes of Spain to seek a safe Northeast Passage by which he could take his treasure home. From the 16th of April to the 3rd of June they sailed northward, fourteen hundred leagues in all, till the extreme cold forced them to turn back. Finally they came to comfortable anchorage in a bay which has been identified as Drake's Bay, north of San Francisco. Here a friendly Indian came out to meet them, tossing a basket of tobacco into their boat. The Englishmen landed, put up tents, and built a rude fort within which to store their treasure while the ship was put in shape. Hither came more and more Indians, seeking to make sacrifice to the newcomers, as if they were gods; but this Drake tried to prevent, showing meanwhile the utmost friendliness. At last came runners from the "King of the Indians," the chief, as we should call him, stating that he was approaching and would shortly visit them.

In the light of our knowledge of Indian customs, it is doubly interesting to read the account of the ceremony which took place and the interpretation of it by the English, who could not understand a word that was said but were forced to depend for their information on the actions of their visitors.

The king with his train came forward, "making as princely a show as he could." They sang as they came, bearing themselves with "a certain comeliness and gravity." In the forefront was a man of

"goodly aspect," bearing what the English called a "scepter" of black wood, about a yard and a half long, on which hung two crowns (plumed headdresses) and three long chains, probably of wampum. All had their faces painted, some with white, some with black, and some with other colors, and all bore gifts in their hands.

As this company came near, Drake drew up his men in line, and they marched out, clad in armor, and with the sound of trumpets, to welcome their guests. The Indians, with the scepter bearer and the king in the lead, broke into a stately dance which they carried on until all were ready to be seated in a circle within the fort. Then Drake was invited to seat himself in the circle, when a "chain" was hung around his neck, a "crown" placed on his head, and the "scepter" put into his hand. The crown was probably the headdress of the particular tribe into which he was being adopted, the scepter, the symbol of the peace pipe. Drake thought he was being made king over them all, and accepted the honor with fitting dignity, restraining every act that seemed like a sign of worship of the white men as gods.

For five weeks he stayed among the Indians, traveling around the region, which he pronounced "a goodly country, with fruitful soil, stored with many blessings fit for the use of man." He named the land "New Albion" in memory of England

which was sometimes called by this name of Albion, and in token of the white banks and cliffs which lay towards the sea; and, before he departed, he set up "a great and firm post" to which was nailed a plate of brass with the queen's name, a sixpence with her likeness, and the record of their visit and their claims. So Drake hoped that he was in the way of becoming a second Cortez and founding a fair new England on these distant shores. It is pleasant to note that he maintained friendly relations with the Indians throughout his visit, and left no bloody record of conquest such as those which stained the records of the explorers of South America.

From California he sailed by the charts taken from Spanish ships to the Philippines, thence to the Indian Ocean, and round the Cape of Good Hope, whence he proceeded to England. It was a hard voyage, with many perils by the way, but what cared they when they sailed into Plymouth harbor for the "two years and ten months and some few odd days beside" that they had spent "in seeing the wonders of the Lord in the deep, in discovering so many admirable things, in going through with so many strange adventures, in escaping out of so many dangers, and overcoming so many difficulties, in this the encompassing of this nether globe, and passing round about the world?"

The greatest moment of Drake's life, his knight-

ing by Queen Elizabeth, was postponed for several months because of the protests of the Spanish ambassador at her court, who insisted that this adventurer was no more than a common pirate who should be hung from his own yard-arms. But the queen sent for Drake privately, suggesting that he bring her "specimens" of his travels. Drake knew well what kind of specimens were desired. He loaded his pack-horses with gold and silver and packed his most precious jewels to take to her.

Some months later, on the fourth of April, 1581, the queen journeyed with a brilliant train of courtiers to the harbor where the *Golden Hind* lay. After a splendid banquet she came aboard the ship and on the deck, in the presence of a great company, bade the captain kneel before her. His head, she said, had been demanded of her. Now she had a golden sword with which to take it off. While all the company held their breath, she drew her sword; then laughed, and, handing the weapon to the French ambassador, bade him give the accolade. The captain rose to his feet "Sir Francis Drake," his coat of arms to be henceforth a ship upon a globe.

Captain Cook Explores the Pacific

1768–1779

Every bit of man's knowledge has been purchased at a price, but of all the sciences which he

has mastered during the centuries none has cost him more toil and hardship than geography. His knowledge of the surface of the globe on which he lives has been gained slowly and painfully through many an ocean voyage and many a long land journey. The maps which we glance at so casually, as we turn the pages of an atlas, were surveyed and charted by navigators who measured each mile of the land's outline against adverse winds, tracing out the line of inlets and bays and promontories from the precarious shelter of a storm-swept deck. "Cape of Good Hope," "Providential Channel," "Robber Islands," "Disappointment Bay," "Port of Health," "Point Desire"—what meanings the names had to the mariners who gave them! Geography is precious above many of the sciences in the annals of brave men who learned it by experience.

Captain James Cook lived two hundred years later than Francis Drake. One would have expected that in that time great advances would have been made in the exploration of the Pacific. But except for the Arctic discoveries of Behring and the Dutch exploration of Australia little had been written into the map of the countries which bordered it. The Straits of Magellan were still the key to that wide expanse of waters, and Spain kept that key jealously guarded so that she might enjoy undisturbed the treasure stores which it unlocked.

But in the eighteenth century times were changing, and no man did more to change them than Captain Cook.

Captain Cook ushers in the new age in exploration, the age in which we are now living. His was the spirit of adventure combined with the spirit of science. He would have been entirely at home with Peary, Scott, and Amundsen, for his voyages were undertaken far more in their spirit than in that of Cortez, Pizarro, or Drake. We can picture him as joining hands across the centuries with that wonderful pioneer of the modern spirit, Prince Henry the Navigator, founder of the School of Navigation, and a man of our own day like Richard Byrd, as he plans and executes his North and South Pole expeditions.

Indeed, he did explore the Antarctic region of Commander Byrd's interest more fully than any man had done it before him, and turned back only when it became impossible to proceed "one inch farther to the south." He confesses to the explorer's ambition, "not only to go farther than any one had been before, but as far as it was possible for man to go."

This Antarctic exploration was undertaken on his second voyage. His first Pacific voyage, in the year 1768, was for the Royal Society of England, a distinguished scientific body which put him in command of a vessel that was to carry a group of

scientists to the island of Tahiti, in the South Pacific, for the purpose of observing the Transit of Venus across the sun, a rare astronomical event which occurs only some twelve times in six hundred years.

It was a great compliment for Captain Cook to be chosen to lead this expedition. The reputation which gained him the honor was based equally on his proved ability as a ship captain and his accuracy and skill in conducting surveys and drawing maps and charts. Besides, he was every inch the explorer, and societies as well as sailors know a leader when they see one. He was tall, "over six feet high, thin and spare; his head was small; his forehead was broad; his nose was long and straight; his nostrils clear and finely cut; his cheek-bones were high; his eyes were brown and small, but well set, quick, and piercing; his mouth firmly set; his face long. It is an austere face," continues his biographer, "but striking . . . the face of a man remarkable for patience, resolution, perseverance, and indomitable courage. . . . It is a face worthy of the navigator." He was never weary, always at work, and entirely indifferent to hardships. Such is our picture of the man who sailed up to the ice mountains of the Antarctic plain, halted only when he could not go "one inch farther."

He carried his first voyage through successfully, enabling his party to observe the passage of the

planet across the face of the sun under favorable conditions. He then spent six months and a half cruising about New Zealand, discovered by the Dutch explorer Tasman a hundred and more years earlier, but little observed or explored since that time. By sailing around New Zealand, he proved that it was not a part of Australia, a point which had been much in dispute among geographers. In his voyage around the island he surveyed some two thousand four hundred miles of land, a typical piece of scientific work of the kind for which he was noted.

His second voyage was to prove or disprove the existence of a great southern continent, which most geographers of the time insisted must lie somewhere in the southern hemisphere in order to balance the continents in the northern hemisphere. One gazes with amazement on maps of the period into which this imagined continent is drawn as firmly and confidently and definitely as are the outlines of Asia or Europe. It must be there, these men said, or the world would be overweighted at the top and would turn upside-down. So they pictured it—its longitude "as much as that of all Europe, Asia Minor, and to the Caspian Sea and Persia . . . a quarter of the whole globe, and so capacious that it might contain unnumbered peoples"; its population a highly civilized race, with whom it would be valuable for Europe and England to come

in contact. It is hard to realize how such an idea could have become firmly intrenched in the human mind, with no geographical basis. Yet how could the Venetians of Marco Polo's day have dreamed of a civilization like that which he found in Cathay or of Cortez' time, of a city like that which he found in Mexico? These wonders had bred in men's minds the feeling that no wonder was too great.

So Cook set out to find this continent if it existed, to explore it, to cultivate a friendship with its inhabitants, making them suitable presents, to go as near the South Pole as possible, and in the course of the voyage to circumnavigate the globe. A large order for any man, but carefully set down in businesslike fashion in his own account of his "instructions."[1]

What did he and his companions find? They sailed into the Antarctic Ocean, reaching latitude 71° 10′ S., and came up against the great southern wall of ice. It was so cold, writes one of the voyagers, "that icicles an inch long frequently hung to the noses of the men,"[2] and again, "the men were cased in frozen snow, as if clad in armor, while the running rigging was so enlarged by frozen sleet as hardly to be grasped by the largest hand."[3] The ice plain extended east, west, and south as far as the eye could reach. Ninety-seven ice hills were counted on the ice field directly before them, while beyond were ranges of ice mountains rising one above

QUEEN ELIZABETH KNIGHTING SIR FRANCIS DRAKE ON BOARD THE "GOLDEN HIND"

He had sailed around the world

De Cou, from Ewing Galloway, N. Y.

THE CALIFORNIA COAST EXPLORED BY DRAKE

He was adopted into an Indian tribe near San Francisco Bay

another till they were lost in the clouds. Captain Cook decided that this ice must extend nearly if not all the way to the South Pole. At least, there was no southern continent here.

So they turned northward and spent the rest of their time in making valuable discoveries and observations of Pacific lands and islands, circumnavigating the globe by their return journey, and arriving in England after an absence of three years and sixteen days. "In the course of this time," writes Cook, "we ran over a greater space than any ship ever did before us; since, taking all our tracks together, they form more than thrice the circumference of the globe. . . . We explored the Pacific Ocean between the tropics and in the temperate zone, and then furnished geographers with new islands, naturalists with plants and birds, and, above all, the friends of mankind with various modifications of human nature." So does he refer to the many native tribes with which he had made acquaintance. One other item of report stands out across the years: "We were likewise fortunate enough to lose only four men." Read the records of other long voyages, and you will begin to realize what that means. Think of the sufferings of Magellan's men, of the men of every crew that had sailed for weeks and months over unbroken stretches of water. It was no unfamiliar tragedy for half or more of the men to die of scurvy. But Captain

Cook had made a study of the diet of his men. He did not keep them on the salt food which was chiefly responsible for the disease, but took the utmost pains to obtain fresh food at every stopping-place and to guard by cleanliness the health of his crew. For this alone his name is well known in the annals of science.

The third voyage was undertaken, as were the two former ones, for scientific purposes. In spite of all the unsuccessful attempts, Englishmen could not give up the idea of a broad and convenient highway of the sea stretching from the Atlantic to the Pacific. Men had failed to find it from the west. Was there still a chance that it might be found from the east? So skilled a Pacific explorer was surely the one to discover its Pacific outlet.

In the search for it Captain Cook followed the route of Drake up the Pacific coast. Not finding it, he went across the Pacific, little dreaming that he was to end his life, as Magellan had ended his, on a distant Pacific island. But he made a record such as no other man had made in a single lifetime, going from the icefields of the Antarctic to the shores of Alaska, as well as exploring thoroughly other parts of the Pacific. He may well be reckoned with Amundsen and Byrd, who are likewise explorers of both the Far North and the Far South.

If Captain Cook had had an airplane, what would he not have done? Yet was it not the more

glory to make his discoveries from the slow-moving prow of a sailing vessel? We could wait till the twentieth century to have the top and bottom of the world surveyed, but we could not spare from our annals of heroism the story of Captain James Cook.

MISSIONARY EXPLORERS

St. Patrick in Ireland
Livingstone in Africa

MISSIONARY EXPLORERS

St. Patrick in Ireland
about 373 to 463 A. D.

AS WE turn the pages of history, we are tempted to measure the importance of exploration in terms of the length of a journey and the value of a man's labors by the circuit of miles which he covered. Yet the name of St. Patrick is written across the face of the Ireland of the fifth century as clearly as the names of Columbus, Champlain, and Captain Cook are written in later years on the globe's surface, for his journeyings marked the beginning of a new era for that island and the years of his patient exploration of every province of that wild land contributed as much to the progress of civilization as the life of many a man who saw more strange peoples and covered more territory. Nor were they without their own adventures, perils, and hardships, for this was a thousand years before the days of Vasco da Gama and Columbus, and only three hundred and fifty years after the coming over of Caesar to the then unknown isles of Britain.

If it had not been for the lad Patrick, we should

never have heard of a raid that took place in the year 400, or thereabouts, when a company of Irish freebooters swept up one of the rivers of England and carried away two hundred Britons as their prisoners. Pirate raids were too familiar on the shores of Britain for any chronicler to take heed of them. But among the two hundred was this sixteen-year-old boy, son of Calpurnius, a freeborn land-holder and member of the council of his village.

The boy's birth and rank did him no good with the pirates. They had no prophetic vision of the work the lad was to do in later years in the island to which they were taking him. He was young, and looked strong and healthy. He would make a good slave for one of their petty chiefs. So he was thrown into the boat with the rest, and sent, after they landed, across the island to a farm "nigh to the western sea," there to work as a swineherd.

The training of Patrick's youth served him well in the hard place in which he found himself. Ill fed, poorly clad, and desperately homesick, he went out for long days and nights on the bleak hillsides to herd his master's cattle and feed his swine. But in his aloneness there came to him a sense of God such as he had never gained in the days of his easy home life in Britain. "I prayed frequently every day," he writes, "and my love and fear of God and faith in Him continually increased. I dwelt in the woods and on the mountain, and woke up to pray

before dawn. I felt no pain, nor frost, nor snow, nor rain . . . for the Spirit was burning within me."

Six long years Patrick spent as swineherd for his master Miliucc. Then, escaping from his captivity, he made his way homeward and gave himself to the life of the Church, doubtless thinking that he would never see Ireland again.

But the recollection of his life there was never far from his mind. As he went on in his Christian training, the call of that needy land pressed upon him. He knew the savage heathen ways. He knew the fears of demons and evil spirits which the Druid priests were teaching the people, and the bloody sacrifices for which they called. The woes of the poor, who suffered as he had suffered, were often before him as he lived his comfortable life in Britain. Then, as if in answer to his thought, there came to him one night a dream in which he saw a man standing beside him with letters in his hand, and as Patrick took one and began to read, it was "the voice of the Irish," calling him back. "I fancied that I heard the voice of the folk who were near the wood of Fochlad [the place of his captivity], nigh to the western sea. And this was the cry: 'We pray thee, holy youth, to come and again walk amongst us as before.'"

Fitted for his mission of service by his knowledge of the Irish language, gained during the years as a swineherd, he went over by choice into the land

to which he had been carried by force in his youth. It was to him, as to any Britisher of the Roman Empire, remote, one of the "ultimate places of the earth," as he called it in his letters. There he spent the rest of his life, traveling up and down the length and breadth of every province, visiting every petty king and over-king and even the High King himself, carrying always in his journeyings the vision of an Ireland which should be freed from the old ignorance and fear and superstition and set in the ways of the Christian faith and education.

He was a strong man, else he could never have stood the hardships of his constant journeyings. Engineers had not come over into this region to build the roads and bridges for which the Roman Empire was famous. In all weathers, through flood and storm, the saint must follow the tiny footpaths, wading through streams, fording rivers, going up hill and down through all that mountainous countryside.

There was no fear in him. A legend tells of his first Easter in Ireland, when he came near to the camp of the High King Loigaire at Tara, before whom he desired to preach his faith. It was, as it happened, the night of a solemn heathen festival, when by the king's command no one was allowed, on pain of death, to light a fire anywhere in Ireland until the sacred fire should have been lighted in the royal quarters at Tara. But upon the darkness

and chill of the night there flashed suddenly from a neighboring hill the bright light of a great bonfire. St. Patrick and his followers were calmly celebrating Easter Eve, regardless of the customs of the heathen land in which they found themselves.

"What meaneth this?" the king asked his magicians in amazement.

"O King," they said, "unless this fire which you see be quenched this night, it will never be quenched; and he who kindled it will vanquish all the kings of Ireland, and rule all the folk of your realm."

"This shall not be," said the king.

So he set forth with the queen, and his two chief magicians, and a host of followers towards the place where the flames were mounting higher and higher in the night.

"Let the fellow who lighted this fire be put to death," had been the king's word before he started. And so it was told to Patrick when he was summoned to come forth and meet the king. But when he, coming out, saw the company of men, with nine chariots which had brought them over the plain and to the top of the hill, he calmly quoted the words of the Psalmist: "Some trust in chariots and some in horses; but we will remember the name of the Lord our God."

The fire was not put out that night. It burned on until the sun rose on Easter morning. "And the king," so the chronicle reads, "returned in the

morning to Tara." St. Patrick, not the High King of the Irish, had prevailed.

A legend, some say! Yes, a legend, as there are many legends of St. Patrick. But out from the mass of legends and from his own writings there stands a commanding figure of a man who through all his long life was bringing only benefits to the land of his adoption. What matter if his journeyings were all within the borders of one single island on the earth's surface, an island the length and breadth of which we cover to-day in a few hours or days? We travel across Ireland, as men travel across the sea, leaving no trace of our going behind us. The sign of St. Patrick's journeying remained to bear witness to him. At the end of his lifetime he had founded three hundred and sixty-five churches, started scores of schools, consecrated four hundred bishops of the faith, and ordained three thousand priests. He had explored Ireland as even her own people had not explored her, and had set up within her boundaries an organized church and a system of church schools. He had found Ireland a separate country; he left her a recognized part of Christendom.

Livingstone in Africa

1871

November tenth, 1871—the date stands out as a shining beacon in the story of Livingstone's thirty

years of exploration of the Dark Continent. There are other moments more important, perhaps, to the geographer, to whom the finding of lakes, falls, and rivers hitherto unvisited by white men is the chief feature of David Livingstone's career. But to-day as in the year of its happening the dramatic moment of his life that catches the popular interest is the one when he was found, two years after he had been given up by most of the world as lost, in a remote interior section of Africa by Henry M. Stanley. That meeting of two white men, with all that it meant to each of them and to the waiting world outside, will never be lost from the pages of history.

To appreciate it we must go back a little into the events that led up to it. It was thirty years since Livingstone had gone out as a medical missionary to Africa. Arriving there, he had felt that the mission work was too much concentrated in the south, and that the vast interior of the continent was being neglected. "I shall open up a path into the interior, or perish," he had written to his father-in-law, Robert Moffatt, and open it up he did! He had pushed on, founding one mission station after another, watching with distress the horrors of the increasing slave trade, and finally transferring his activities almost wholly to the task of exploration, in the thought that Christianity must go ahead of trade if Africa were to be saved. A trained scientist,

he had mapped out the course of his explorations in a way that had won him high honors from the Royal Geographical Society in England. He had opened up Central Africa and discovered Victoria Falls. In the eighteen months following his second long stay in Africa, he had lectured and written his book, "Missionary Travels and Researches in South Africa," had been given medals and honored by the Queen. A third time he had gone back, with the farewell word, "I go back to Africa to make an open path for commerce and Christianity."[2]

In 1865 he went to Africa for the last time, setting out from Zanzibar on an expedition in search of the sources of the Nile. In spite of all he had suffered in his earlier journeys, he was eager to be off again. "The mere animal pleasure of traveling in a wild, unexplored country is very great," he writes. "The sweat of one's brow is no longer a curse when one works for God; it proves a tonic to the system, and is actually a blessing." Six years went by, years of great difficulty. His health was failing under the strain of repeated attacks of fever. For a time letters came from him occasionally; and then there was no further word. Two years went by, and still he had not been heard from. Friends gave him up as lost. There was talk of organizing an English expedition to get news of him. Then an American stepped into the picture, Mr. Bennett, of the *New York Herald*, summoning Henry M. Stanley, one

of his correspondents, to Paris to ask him, "Where do you think Livingstone is?" Stanley could not tell, did not even know he was alive. "Well," said Mr. Bennett, "I think he is alive, and that he may be found, and I am going to send you to find him."

Such were the preliminaries of the dramatic moment when Stanley found Livingstone. Stanley's party was organized and traveled far into the interior, not knowing whether the man they sought was alive or dead. Native rumors had reached them, but no information on which they could depend. At last, on November third, they met a caravan which told them that a white man had just arrived at a certain village a few days' journey ahead.

"This news startled us all," writes Stanley. "'A white man?' we asked. 'Yes, a white man.' 'How is he dressed?' 'Like the master,' they answered, referring to me. 'Is he young or old?' 'He is old. He has white hair on his face, and is sick.'"

Was it Livingstone? That was the question that burned in Stanley's mind as he pressed on, hindered by native tribes who robbed his caravan and made his way difficult, until, as he entered the village of Ujiji, seven days later, he was startled to hear a voice from the crowd of black men who were pressing about him, say "Good morning, sir!"

Such a salutation was as startling in the heart of Africa as the firing of a bomb in a peaceful desert. Turning to see whence it came, Stanley found at his

side a black man dressed in a long white shirt, with a turban of American sheeting wound about his head.

"Who the mischief are you?" asked Stanley.

"I am Susi, the servant of Dr. Livingstone," said he, smiling and showing a row of gleaming teeth.

"What! is Dr. Livingstone here?"

"Yes, sir."

"In this village?"

"Yes, sir."

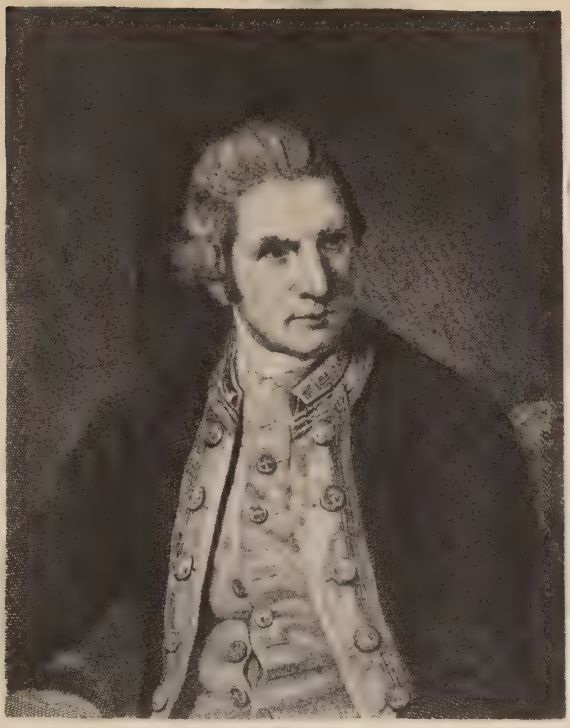
"Are you sure?"

"Sure, sure, sir. Why, I leave him just now."

At Stanley's direction Susi ran ahead to tell the doctor they were coming. The caravan proceeded, surrounded, crowded upon by the native villagers.

"I pushed back the crowds," says Stanley, "and walked down a living avenue of people, until I came in front of the semicircle of Arabs, in the front of which stood the white man with the gray beard. As I advanced slowly towards him, I noticed he was pale, looked wearied, had a gray beard, wore a bluish cap with a faded gold band round it, had on a red-sleeved waistcoat and a pair of gray tweed trousers. I would have run to him, only I was a coward in the presence of such a mob —would have embraced him, only . . . I did not know how he would receive me. So I . . . walked deliberately to him, took off my hat, and said:

"'Dr. Livingstone, I presume?'



CAPTAIN JAMES COOK, THE FIRST OF THE SCIENTIFIC EXPLORERS

Captain Cook disproved the existence of a vast southern continent which the maps of his day pictured firmly and definitely

VICTORIA FALLS, AFRICA, DISCOVERED BY LIVINGSTONE

David Livingstone explored the unknown interior of the Dark Continent on foot and alone

"'Yes,' said he, with a kind smile, lifting his cap slightly.

"I replaced my hat on my head, and he put on his cap, and we both grasped hands, and I then said aloud:

"'I thank God, Doctor, I have been permitted to see you.'

"He answered, 'I feel thankful that I am here to welcome you.'"

The two men seated themselves on the platform in front of Livingstone's house, and there they sat, while more than a thousand natives gazed at them, discussing the fact of two white men, one coming from the east and one from the west, meeting at their village of Ujiji. The doctor and Stanley exchanged questions and answers. But all the while, as Stanley says, he was gazing at Livingstone, "conning the wonderful man at whose side I now sat in Central Africa. Every hair of his head and beard, every wrinkle of his face, the wanness of his features, and the slightly wearied look he wore, were all imparting intelligence to me—the knowledge I craved for so much ever since I heard the words, 'Take what you want, but *find Livingstone.*'"

Hours went by as the two men sat and talked, Stanley giving the news of the world for the past five or six years, how the Suez Canal had been opened, that Grant had been elected President of the United States, and other current events. Food

was brought to them, and more food, and more food. Dr. Livingstone confessed that he had had no appetite and that he had been unable to take anything of late but a cup of tea. Yet in the stimulus of Stanley's presence he ate like a vigorous and hungry man. At last Stanley insisted on retiring so that the doctor could read the year-old bag of letters which he had brought him.

This day was but a beginning. For four months Stanley stayed with the man he had come so far to find, helping him with supplies, discussing with him his plans, and pouring new life and energy into the wearied frame of the explorer. He urged the doctor to return with him, but Livingstone felt that his work was not done. Another year and a half or two years at the most, and he would have discovered the sources of the Nile. Much as he longed to return and see his children, he could not leave his self-appointed task unfinished.

Stanley took his journals and letters back to England, where Dr. Livingstone hoped in another two years to follow him. But no white man ever saw the face of the great explorer again. He died in the country he had done so much to open to the world.

There is no American who does not thrill at the thought that it was an American who traveled into the interior to find him, who cheered him in his last journey, and brought the word of him which will last for all time.

FORBIDDEN LANDS

Russia by the Back Door
Perry in Japan

FORBIDDEN LANDS

Russia by the Back Door

1553

IT WOULD have been a curious experience to travel by airplane around the world in the fourteenth and fifteenth centuries and discover groups of people, whole nations, living in their own territories and building up their own civilizations, without any knowledge of their neighbors on the globe who, a few hundred or thousand miles away, were living their lives in as complete ignorance of the rest of the world. There would have been the great South American civilizations, the court of Peru, and the court of Mexico, and all the Maya and Aztec temples and cities, with their peoples living out their lives with never an inkling of Europe over across the Atlantic. There would have been the islands of Japan with their wholly different kinds of cities, temples, and villages. There would have been Cathay, and the court of the Great Khan, of which England and Europe were just beginning to have knowledge, and away to the north there would have been Russia.

If the airplane traveler dropped low enough in his

machine to see the countries over which he was sailing, he would have found the physical reasons for this separation. Water covered a large part of the earth's surface, and until man mastered the art of building large and trustworthy boats it was a well-nigh insuperable barrier to long journeys. Mountains and deserts lay between the great cities. Whole parts of the earth were covered for many months of the year by snow and ice, making their ways impassable.

So much any observer could have seen. But if beside his magic airplane he had been a wonder-man who could read the hearts of men, he would have found other barriers, as solid and impenetrable as the ice-covered mountains or the wind-swept deserts, and as far-reaching as the seemingly endless wastes of water. These were the barriers of ignorance and fear. The nations that lived unto themselves felt in their separateness a security. They did not trust the people who lived nearest to them. They would have dreaded greatly the contact with peoples of other customs and ways.

There was good reason for these fears. Mexico and South America were to fare badly at the hands of European invaders. The Indians of the United States and Canada might well regard with suspicion the white-faced strangers who came among them. In ignorance of any race but their own lay their present comfort, as far as their life had comfort

and peace. Yet, with all their separateness, these peoples did not find peace. There was always trouble within their own borders, even though they had no contacts with outsiders. And the law of life, the law of the world's progress, was on the side of the explorer, the trader, and the colonizer. They were the forerunners of the great movements which were, in five hundred years, to make the world one. So the prophetic traveler, circling the globe in his airplane, would have dropped down often to watch the tiny ships which were making their voyages across the seas, the caravans that were crossing the deserts and mountain passes, and the travelers who were making their way across lands which were new to them. These would have been the people that interested him, for he would have seen in them the links which were to draw together nations each living in its own part of the earth's surface as if that part were an island or a separate planet.

Such a pioneer was Richard Chancellor, sent out with Sir Hugh Willoughby from England in the year 1553, with a letter from Edward, the boy-king of the English, "to all Kings, Princes, Rulers, Judges, and Governors of the earth, and all others having any excellent dignite on the same, in all places under the universal heaven;" wishing to them "peace, tranquillitie, and honor,"[2] and desiring to enter with them into relations of friendly

trade and intercourse. The argument for trade, as an exchange of the commodities which one nation might happen to have with those quite different articles which belonged to the life of another people in another quarter of the globe, is based on sound reasoning, as sensible as that of any textbook of commerce, though it is written in a style more like the epistles of the New Testament than that of the modern sales talk. "For the God of heaven and earth greatly providing for mankind, would not that all things should be found in one region, to the end that one should have need of another, that by this means friendship might be established among all men. For the establishing and furtherance of which universall amitie, certain men of our Realm . . . have instituted and taken upon them a voyage by sea into far countries, to the intent that between our people and them, a way may be opened to bring in and carry out merchandise."

This was the commission under which Sir Hugh Willoughby and Richard Chancellor set out from England in the year 1553 for a northern cruise, to search out such lands as they might find and hand their king's letter of greeting as a kind of passport to the favor of any "Kings, Princes, Rulers" and other dignitaries whom they might meet. Within six weeks of their departure the two ships became separated in a violent storm. Sir Hugh Willoughby was never seen alive again. But Richard Chancel-

lor, "pensive, heavy, and sorrowful," pursued his way, sailing "so far that he came at last to the place where he found no night at all, but a continual light and brightness of the Sun, shining clearly upon the huge and mighty Sea." He was approaching Russia by way of the White Sea, arriving by the northern back door, as it were, instead of the more natural approach from Europe.

The front door of Russia had been closed to the people of Europe. Strangers arriving on the frontier had been turned back. Suspects who made their way past the frontier had been escorted out with scant courtesy. The dealings of the Russians with their Western neighbors during the early Middle Ages had not led their rulers to encourage further intercourse. Russia was to the people of Europe practically a forbidden land.

But these merchants from England were not arriving by the usual door, nor were they arriving in the usual way. The fishermen of the White Sea were greatly frightened by the size of the *Bonaventure*, Chancellor's vessel, and fled before the newcomers. When they could be persuaded to come near, they prostrated themselves before him, offering to kiss his feet. "But he (according to his great and singular courtesie) looked pleasantly upon them, comforting them by signs and gestures, refusing those duties and reverences of theirs, and taking them up in all loving sort from the ground." The report went

out of the arrival of a "strange nation of a singular gentlenesse and courtesie." The barrier of fear was being removed by the Englishmen, who were learning also of this country called Russia or Muscovy, which was ruled over by Ivan Vasiliwich, known in history as Ivan the Fourth, "The Terrible." But he was not to be "The Terrible" to these arrivals from England. Messengers were sent to inform him of their coming, but the delay in their return was so great that Chancellor finally set out on the overland journey without invitation, to be met, however, after many days' travel by sledge over the snow, by messengers from the king inviting him to the court. Fifteen hundred miles they traveled over snow and ice before they came to Moscow, chief city of Russia, "as great as the city of London with all its suburbs."

It is an interesting picture that Chancellor and his companions give of the Russian capital at this date, "with many and great buildings in it, but for beauty and fairness, nothing comparable to ours." The palace seemed bare to the eyes accustomed to the beauties of English architecture, but the reception by the king lacked nothing in splendor and ceremony. One hundred courtiers, all apparelled in cloth of gold down to their ankles, greeted the Englishmen and conducted them into the presence of the emperor, who sat on a "very royal" throne, wore on his head a crown of gold, held in his hand a

scepter set with precious stones, and was clothed in beautifully wrought cloth of gold.

The letter was received, and questions were asked and answered through interpreters who knew a little of the English language. Then the company was invited to dinner which was served in the Golden Court. If the guests had been impressed before, they were doubly impressed now. The emperor appeared clad this time in a robe of silver, with a different diadem on his head. He ate from marvelous golden plates and drank from golden goblets which were kept in a separate cupboard beside the table and set apart for royal use. On each side of the hall stood four tables, "each of them laid and covered with very clean table cloths," at which many guests were seated. They were dressed in linen and rich furs. Before the coming in of the meat, the emperor himself, according to an ancient custom of the kings of Moscow, bestowed a piece of bread upon every one of his guests, naming each in turn. The guests were then seated, and the "gentleman usher of the hall" came in, followed by a company of servants. He bore a young swan in a golden platter, and delivered it to the carver, who cut it up, and served it to the emperor and his guests. Before the emperor touched food, the gentleman usher tasted it. Then, when he was assured it was suitable and had not been poisoned, the gentleman usher's duties were at an end,

and he departed. The feast lasted until candles were brought in, as darkness was falling. Two hundred guests had eaten off gold plates and had their wine in gold goblets. The serving men had all been apparelled in cloth of gold. "What shall I further say?" writes Chancellor. "I never heard nor saw men so sumptuous."

Such was the story that the Englishmen carried back home, with a polite letter of greeting from Ivan the Fourth, and permission for merchants to trade within Russian borders. The barriers of ignorance and fear had disappeared with the interchange of courtesies between the ambassador of "singular gentleness," Richard Chancellor, and the mighty emperor of the Russians.

Perry in Japan
1853–1854

"For the future let none, so long as the Sun illuminates the world, presume to sail to Japan, not even in the quality of ambassadors, and this declaration is never to be revoked on pain of death."

Such was the edict of 1639 which made of Japan a "forbidden land" to the rest of the world for more than two centuries. There was reason for the edict. One hundred years of contact with outsiders had convinced the island people that their greatest good lay in isolation.

The first European contacts had been such as to make them welcome more. In 1542 a junco with three Portuguese sailors on board had been blown out of its course and reached Japan. Soon after this one of the Pacific explorers, Fernando Pinto, landed there. As in the case of Montezuma, the visitors were helped by an old prophecy of the coming of white men. "These are certainly those spoken of in our records," it was said, "who, flying over the waters, shall come to be lords of the lands where God has placed the greatest riches of the world. It will be fortunate for us if they come as friends." Pinto had left, to return again in 1547, taking with him two Japanese fugitives, one of whom was met at Malacca by the famous missionary, Francisco de Xavier, who went back with Pinto to Japan and there labored for seventeen months. His personality and message were irresistible. Tens of thousands were baptized into the Christian faith. Churches were built. It is another record like the story of St. Patrick. But later contacts with Portuguese and Dutch traders were not so successful. Political troubles came, and finally in 1639 the edict of isolation was pronounced. So far as Europe and America were concerned, Japan dropped out of the picture.

The marvel is that the Island Empire could hold out so long. But such separateness could not be maintained in the nineteenth century. In July, 1853, Commodore Perry sailed with two steam

frigates and two sloops of war into the Bay of Uraga, bearing a letter from the President of the United States seeking a treaty with Japan which should insure friendship between the two nations, commercial relations, access to coal and provisions for vessels making the long Pacific passage, and arrangements of a satisfactory kind concerning shipwrecked sailors, of whom, with the increasing traffic on the Pacific, there had already been many.

The picture of the events which led up to the signing of the desired treaty is not a pleasant one. Fear and distrust were everywhere apparent. In this day of open ports and friendly intercourse, it is hard to think such scenes could have taken place. Yet is it not by remembering these events that we get a vision of the progress that the world has made in fifty, seventy-five, one hundred years?

The place appointed for the meeting was "a hut set up on the beach, having two smaller ones behind it, the whole inclosed by white and striped curtains hanging from poles." The Japanese had not wanted to receive the message. They had refused, indeed, to receive it here, but Commodore Perry had insisted, and to this beach, with a village of thatched huts in the background, officials had come to take the President's epistle, which should then be conveyed to the Mikado.

"The hills rose behind," writes Mr. S. Wells Williams, one of the Perry party, "partly cultivated

and looking exceedingly fresh and green, inviting us in vain to explore their slopes, for the ridiculous laws interfere to prevent our trespassing on them. Truly, laws which prevent such things must have been brought about by a hard and dear experience, for it is against nature thus to prohibit intercourse between man and man."

Happily for us Bayard Taylor, traveler and writer, was a guest of Perry. His account, with the journal of Mr. Williams to supplement it, gives a vivid picture of the scene.

"The morning was very bright and clear, and the fifteen launches and cutters, containing the officers, seamen, marines, and bandsmen, presented a brilliant appearance as they clustered around our starboard gangway. Commander Buchanan took the lead, in his barge, with one of the Japanese Government boats on each side. Merrily as the oars of our men dipped the waves, it required their utmost to keep pace with the athletic scullers of Japan. . . . The gleam of arms, the picturesque mingling of blue and white in the uniforms, and the sparkling of the waves under the steady strokes of the oarsmen combined to form a splendid picture, set off as it was by the background of rich green hills and the long line of soldiery and banners on the beach. All were excited by the occasion, and the men seemed to be as much elated in spirits as those who had a more prominent part in the pro-

ceedings. We all felt that as being the first instance since the expulsion of the Portuguese from Japan, when a foreign Ambassador had been officially received on Japanese soil, it was a memorable event in the history of both countries."

Three hundred Americans were landed, seamen, marines, officers, and two bands. The Japanese troops numbered several thousand. On the slope of the hill near the village a great number of natives watched the event. Both sides were fully armed, to guard against any surprise, and the American boats stayed near by in the harbor to cover the scene with their guns and cannon.

As soon as Commodore Perry landed, all fel. into procession, the marines leading with one of the bands. A tall standard bearer, escorted by two negro seamen, carried the broad pennant of the Commodore. Behind them two sailor boys bore the letter of the President and the Commodore's letter of credence in "sumptuous boxes wrapped in scarlet cloth." Then came the Commodore himself with his staff and escort of officers, followed by the seamen in martial array.

"The building into which the Commodore and his suite were ushered was small, and appeared to have been erected in haste. The first apartment, which was about forty feet square, was of canvas with an awning of the same of a white ground with the Imperial arms blazoned on it. The floor was

Photograph by Brown Bros.

ENTERING RUSSIA BY THE BACK DOOR

Englishmen journeyed to Moscow from the North and found a cordial welcome

THE "MAIN STREET" OF YOKOHAMA, JAPAN

A "Forbidden Land" for two hundred years

covered with white cotton cloth, with a pathway of red felt, leading across the room to a raised inner apartment. . . . This apartment was hung with fine cloth, containing the Imperial arms in white on a ground of violet. On the right hand was a row of armchairs, sufficient in number for the Commodore and his staff, while on the opposite side sat the Prince who had been appointed to receive the President's letter, with another official of similar rank." Both Princes were dressed in heavy robes of silk, wrought with elaborate ornaments in gold and silver thread. They rose and bowed gravely as the Commodore entered, then took their seats and remained as silent and impassive as statues during the interview.

"At the head of the room was a large scarlet-lacquered box with brazen feet, beside which Yexaimon and the interpreter, Taksonoske, knelt. The latter then asked whether the letters were ready to be delivered, stating that the Prince was ready to receive them. The boxes were brought in, opened, so that the writing and the golden seals were displayed, and placed upon the scarlet chest. The Prince of Iwami then handed to the interpreter, who gave it to the Commodore, an official receipt in Japanese, and at the same time the interpreter added a Dutch translation. The Commodore remarked that he would sail in a few days for Loochoo and Canton, and if the Japanese Government

wished to send any dispatches to those places he would be happy to take them.

"When will you come again?" asked the interpreter.

"As I suppose it will take some time to deliberate upon the letter of the President," replied the Commodore, "I shall not wait now but will return in a few months to receive the answer."

After a little talk Perry said that the ships would probably return in April or May.

"All four of them?" asked the interpreter.

"All of them," answered the Commodore, "and probably more."

Thus ended the conference. "No signs of refreshment appearing," comments Mr. Williams, "there was nothing else to do but go." The two Princes rose as Commodore Perry retired from their presence. They had fulfilled to the letter their instructions not to speak to their American guests.

In less than twenty minutes all were embarked, and before noon the squadron was on its way, but not before the Japanese interpreter and several of his escort had paid a visit to the boiler room and been shown how the steam engine worked. When Perry returned in the following winter, he brought a model, one-fourth the regular size, of a locomotive, tender and passenger car, which was set up on the shore and put in operation, the train running around the track at a rate of twenty miles an hour.

A mile of magnetic telegraph was also erected on the shore and put in operation. Thus the first scientific exposition was set up by Commodore Perry on the shores of Japan, and the eager crowds of intelligent observers gave evidence of the readiness of these people to observe and adopt all the modern scientific devices, a readiness which was to put them within fifty years into the ranks of "first-class" world powers.

Perry got his treaty, signed on the thirty-first of March, 1854, at Kanagwa, the first foreign treaty negotiated by the government of Japan with any nation. Great Britain, Russia and the Netherlands gained similar treaties in 1854, 1855, and 1856. Japan had come into the family of nations.

BURIED TREASURE

Finding Gold in California
The Star of South Africa

BURIED TREASURE

Finding Gold in California

1848

THE story of the "Forty-Niners" and the California Gold Rush is part of the history of our nation. It is interesting to go back to the simple scene with which it began.

In the middle of the last century California was just beginning to interest Americans. It had been first a Spanish and then a Mexican possession, but American soldiers and business men were going over on exploring parties into its mountain slopes and valleys. One of these was Captain John Sutter. He had set up a flour mill and built a fort, which served as a trading post, in the Sacramento region, and was also engaged in extensive lumbering operations. There were probably three hundred white men in the district, many of them raising crops for use in his mill or working in his lumber camps.

One of these men, James Marshall, was sent in the summer of 1847 into the Sierra Nevadas to build a saw-mill. He located it at Coloma, on the South Fork of the American River. The mill was finished in late December, but was not put into operation because, owing to some difficulty in the

placing of the mill-wheel, the water did not come through satisfactorily, and it was necessary to deepen the tail-race. For this purpose Indian laborers were set during the daytime to pick up the large rocks. Each night the water was turned on to wash out the débris that accumulated during the day.

On January twenty-fourth Mr. Marshall and Peter Wimmer, his foreman, went out to the mill to shut the gates and empty the basin for the day's work. Mrs. Wimmer tells the story.

"The water was entirely shut off, and as they walked along, talking and examining the work, just ahead of them on a little rough, muddy rock lay something bright like gold. They both saw it, but Marshall was the first to pick it up, and as he looked at it, doubted its being gold. Our little son, Martin, was along with them, and Marshall gave it to him to bring up to me. He came in a hurry and said: 'Here, Mother, here's something that Mr. Marshall and Pa found, and they want you to put it in saleratus water and see if it will tarnish.'"

Mrs. Wimmer was a Georgia woman, familiar with gold mining.

"I will drop it in my lye kettle," she said, "and if it is gold, it will be gold when it comes out."

Evidently no one expected much of it, for it was not until the next morning at the breakfast table that one of the workmen said:

"I heard something about gold being discovered. What about it?"

They told him to ask Mrs. Wimmer, who replied that it was in her soap kettle. This was brought out, and she cut her soap into pieces, but found no gold. At the bottom of the kettle, however, there was a double handful of potash. She lifted this in her hands, and there was the gold, as bright as ever.

Three days later, according to Captain Sutter's diary, Marshall appeared at the fort and requested a private interview. He insisted that the door be locked, and the captain humored him, thinking this desire for secrecy was, as he puts it, "some freak of his."

"Are we alone?" Marshall then asked Sutter.

"Yes."

"I want two bowls of water," said he.

The bowls were brought, and a pair of scales was fetched from the apothecary shop. When Sutter returned with them he shut the door but did not lock it. As Marshall pulled out of his pocket a white cotton rag with something rolled up in it, a clerk opened the door.

"There," exclaimed Marshall, "did I not tell you we had listeners?"

Sutter sent the clerk away, telling him to see that no one interrupted them. Then Marshall opened the cloth again. It contained about an ounce and a half of yellow powder, flaky and in grains, the

largest piece not quite as large as a pea, and from that down to less than a pinhead in size.

"I believe this *is* gold," said Marshall, "but the people at the mill laughed at me and called me crazy."

They applied such tests as they knew, and then looked up others in a volume of an old encyclopedia.

"I believe this is the finest kind of gold," declared Captain Sutter, when the tests were done.

And he was right. This was gold dust, and the valleys were full of it. The first men had only to go out and find it as Marshall had done. Others, who followed, adopted the usual mining processes. The news spread at once over the district, and neighboring towns were deserted. It spread over the country and around the world. In six or eight months the California Gold Rush was on.

Why was this a great moment in exploration? Let the newspapers and diaries of the day tell the story. New England whaling vessels had previously found a convenient port in California, and occasional pioneers had reached the coast by one route or another. But now, where one and two had pioneered, there were hundreds and thousands. Some sailed around Cape Horn. Others took ship for the Isthmus of Panama, followed Balboa's route across the country, and then took ship again, going north to California. A great army took the overland

route across the continent, traveling by ox-train and "prairie schooner." The hardships which they endured match and exceed those of the explorers of earlier centuries. Men, women, and children perished on the way. But month by month the great migration went on, and where they toiled slowly across desert, mountain, and prairie, great railroad routes run to-day. They were the pioneers who explored the great area that had shut off the Pacific coast from the rest of the country.

In the year 1849 one hundred thousand people came to California. Within five years, more than a billion dollars' worth of gold had been taken out of the ground where it had lain buried for so many thousands of years. In 1850 the state of California was admitted to the Union. Exploration had had its quick result in colonization and an established government. The Atlantic seaboard and the Pacific coast could be counted the borders of a great, united nation.

The Star of South Africa
1867–1869

Discovery by accident—such is the story of the finding of the first diamonds in South Africa. But was it accident, or was the same spirit that had sent men exploring since the dawn of history turning the thoughts of men to the Dark Continent,

sending Livingstone out with his purpose "to open up a path for commerce and Christianity" and guiding the fortunes of "pretty stones" picked up by children at play?

They were the children of Daniel Jacobs, a Boer farmer, and as they were playing on the banks of a tiny stream that ran near their home, they waded into the water and picked up handfuls of stones to take home for playthings. One which they showed to their mother was so bright and sparkling and of such an odd shape that she noticed it. When an old friend of the family came to the house the next day, she told him of it. This neighbor, Van Niekirk, wanted to see it, and she went out to the children to have them bring it in. But they had lost it. Only after a long search did they find it for her.

Van Niekirk agreed with Mrs. Jacobs that it looked as if it had some value and offered to buy it from her. But she would not hear to taking money from a friend and neighbor for a pebble picked up by her children on the bank of the stream.

"Take it, sell it, and make your fortune," she told him laughingly.

The stone was a fortune in itself, but no one knew enough to recognize it. Van Niekirk gave it to a trader, John O'Reilly, who was to dispose of it for what he could get and give him half the profits. O'Reilly took it to Hopetown and showed it to some of his friends. But while they agreed it was a

pretty pocket piece and an odd rock-crystal, they saw no value in it. O'Reilly began to get jealous for his stone and showed them what it could do, how he could write with it on glass. More than one windowpane in Hopetown had his name written into it so clearly that it could not be rubbed off.

One would have thought this writing on glass would have made some one suspect that this was a diamond, for that is one of the familiar ways of testing a diamond. But this stone was so big that no one could dream of its being a real diamond. That seemed beyond the possibilities. To them it was simply an odd stone with some unusual properties, such as this hardness that made it scratch glass as would a diamond.

Finally O'Reilly gave it to an English government official, who offered to send it to a mineralogist for testing. He had so little idea of its real value that he mailed it in an ordinary gummed envelope to his friend, Dr. Atherstone. Happily for the safety of the stone Dr. Atherstone recognized it as a diamond, though such a one as he had never seen. Most of the diamonds we see in finger rings weigh from half a carat to one or two carats. This stone weighed twenty-one carats. Dr. Atherstone took it to the English governor, or Colonial Secretary, who bought it for twenty-five hundred dollars and sent it for exhibition to the Paris Exposition of that year. There many mineralogists examined it and

declared that it was a true diamond, a wonder diamond in size.

Still no one thought of it as anything but a single curiosity, a freak of nature. Such a stray diamond might be picked up in some other remote part of the world, but its finding in any one place was simply an accident.

But Van Niekirk, who had had this one given him from the Jacobs' back yard, kept his ears open for more tales of strange stones. Two years later he heard of a shepherd boy on a farm near the same river who had found an even bigger stone. He hurried to the place and bought the stone from the boy, giving him in return what was to the lad untold wealth, five hundred sheep, ten oxen, and a horse. A Hopetown firm was glad to buy this one at once from Van Niekirk, paying him the equivalent of fifty-six thousand dollars. In London it would have brought more, for this was the famous "Star of South Africa," weighing in its uncut state eighty-three and a half carats.

The first diamond had been treated as a freak. The "Star of South Africa" set the people to thinking. If there were two such enormous diamonds in this region, there must be many more. The region was flooded with diamond seekers; the Kimberley mines were opened; and South Africa became the world's greatest diamond center.

So the play of Boer children, and the lucky find

of an African shepherd boy, changed the whole history of South Africa. The treasure which had been buried for so many hundreds and thousands of years has been finding its way ever since to the jewel shops of New York, Paris, London, all the great cities of the world.

Courtesy of Geo. L. Shuman & Co.

CULLINAN DIAMOND, THE "STAR OF AFRICA"

An African shepherd boy picked up this diamond, which led to the discovery of the rich Kimberley mines

Courtesy of American Museum of Natural History, N.Y.

ROCK PAINTINGS IN THE CAVES OF SPAIN

"A bull, a bull," cried a little Spanish girl, as she discovered these drawings by prehistoric cavemen

FORGOTTEN PEOPLES

When a Child Turned Back the Clock of Time
Troy Unearthed
In the Valley of the Tombs of Kings

FORGOTTEN PEOPLES

When a Child Turned Back the Clock of Time

Backward, turn backward, O Time, in thy flight,
And make me a child again just for to-night.

SO THE poet prayed, but only his own memory could answer his prayer, making him see himself again as the child he once was.

History is man's effort to turn back the clock of time and see himself in every period since mankind set up its dwelling-place on this round earth. Each one of us can turn back his own clock of time by memory. Mankind turns back his clock when he reads the records which men of the past have left behind.

But there comes a place, if we go back far enough, when history seems to stop. There are no written records; there are no myths or legends. The thread of man's life on earth as it is followed back, back, back into the dark ages before history seems to be lost.

Hundreds of times man has been halted thus in his search back into the past of the race. Then some hand has turned the clock of time back a little farther; some clue has been found which enabled

him to follow the thread through another and earlier period of the childhood of the race. Such a clue was given, not very long ago, by the bright eyes of a little Spanish girl.

She was the daughter of a Spanish nobleman by the name of Sautuola, and lived on a big estate where there were many underground caves and grottoes, as there are in some parts of the United States. Her father was an archaeologist who had studied much into the records of the past as they are preserved in stones and tablets, weapons and tools. He went in 1878 to the great International Exhibition in Paris, and was much impressed by the exhibits of prehistoric tools and weapons which had been found in southern France. He remembered the caves on his own place and wondered if these, too, might show signs of having been occupied by men of the Stone Age.

As soon as Sautuola reached home, he began to spend part of each day exploring the caves on his estate. Many of them had been closed by rocks which had fallen and were blocking the entrance. But he cleared away patiently one passageway after another until he could reach the inner chambers of these great limestone grottoes. When the way was not difficult or dangerous he took his little daughter with him on these trips.

One day when her father was poking about among the stones and rubbish on the floor of a large

inner room in one of these caves, she wandered off by herself, looking up and around to see what she could see. All at once she ran to her father and said, "A bull, a bull!" Her father went on with his work, thinking she was inventing a story or playing a game. But she would not let him continue. "A bull," she repeated, pointing to the roof of the cavern. "Come and see." Then her father lifted his lamp and went with her to the corner of the room. There over his head was a large drawing of a bull, painted in a soft red tint on the stone roof. Excited, he ran up and down the cave with his lamp held high, the little girl following him. This was not a single figure that they had found. The whole roof of the cave was covered with a crowd of excellently drawn animals, bulls, horses, and deer. Some of them were drawn lifesize; others were smaller to fit into the curves of the limestone cavern.

The little daughter thought of them only as pretty pictures. But the nobleman knew that here was a wholly new record of the life and art of the men of the Stone Age, cavemen who had lived in these hollows in the rocks ten, twenty, or thirty thousand years before his time. Written history goes back nearly eight thousand years in its story, and makes no mention of the peoples who drew these pictures. The stone weapons and tools which had been found in the caves had been up to this time practically the only signs of a race which had dwelt in these

regions thousands of years before recorded history began. Now these people were shown to have been artists. They had pictured on the walls of their homes the animals which they had gone out with their stone weapons to hunt.

Knowing only their weapons, and burial piles, and other such remains of their life, men of modern times had thought of these early cavemen as rude savages. But here were pictures which showed them to be artists and artisans of no mean skill. Sautuola could hardly bear to leave the cave, lest he return to find the pictures vanished and the whole wonderful experience a dream. But no! his little daughter was no dream, and she was walking up and down the cave naming the animals one after another from the drawings, with no concern as to whether they had been painted twenty thousand years before or done in that very year, as were the animals pictured in her books.

Students of archaeology came at Sautuola's summons to admire the fresh colors and the clever drawing of these wall pictures. Other men started to search in the caves of southern Spain and France, where there were many of these limestone caves, and found other drawings, though none more perfect than these first ones.

So the clock of time was turned back to the Stone Age by the curiosity of a little girl, who set out to explore for herself. And man, looking back, saw

himself in the childhood of the race not simply a rude savage, working only to gain a bare living by his toil, but a man of like feelings to men of modern times, who sought with such poor tools as he had to make beautiful pictures in his cave homes and temples.

Troy Unearthed
1870–1873

Across the centuries two moments come together, the one the outcome of the other.

Of one we have had our picture, of blind Homer telling in the market-place his story of the siege of Troy, that famous city within the walls of which lived the beautiful Helen over whom the Trojan War was fought. He spoke, and it would have seemed as if his words, fashioned of breath, unrecorded, died on the listening air. But words of beauty and of power are never allowed to perish. His listeners had no paper on which to write them and no skill with pen or pencil if they had had paper. But they wrote the tales in their minds. In those audiences were story-tellers who listened again and again to the tales as they fell from the poet's lips, until they, too, could speak the matchless words. So they were kept in memory until the day came when they should be written down and preserved for all time.

Centuries passed. Printing came. The treasures of knowledge which had been open only to the rich and learned became the common property of the people. The little son of a German pastor heard in his village home the stories of Achilles and Hector and Patroclus and of the Trojan War. Again and again he made his scholarly father repeat them until they were written on his mind as they had been written on the minds of Homer's listeners thousands of years before.

"Where was Troy?" he asked.

"No one knows," replied his father; "probably somewhere in Greece."

"But have they never found it?" he questioned.

"No," said his father.

"Have they looked for it?" he persisted.

His father told him how in the centuries the very look of the ground had changed in Greece, how the wind had swept in from the ocean and down from the mountains and had brought with it clouds of earth which had buried old cities. Now Greece had lost much of its former glory of beautiful cities, he said. The people who tilled the ground and lived in villages and towns in the countryside knew little of those who had dwelt in their land in the past, save that a few ancient temples had been found and a column of stone or a piece of broken pottery had been unearthed, showing that other peoples had lived in ancient times on the same sites.

"But has no one looked for Troy and found it?" asked the boy again.

"No, no one has found it," replied his father.

"Perhaps it was not a real city," the boy said in a troubled tone.

This doubt stayed in his mind for some time. Then some one, knowing how he cared for these tales, gave him a book in which they were written down, and there on the first page was a drawing of the city of Troy in flames.

"There was a city of Troy," he said to himself, "a real city. Homer did not make it up out of his head."

He studied the picture. The city in the picture was afire. But it was a stone city. Stone did not burn. Besides, no fire would have burned a whole city, he decided in his child's mind.

"When I am a man, I am going to find Troy," he announced to his playmates. They laughed at him, but he did not care. From that day until the moment when he unearthed the ruins of the city of Troy, buried under the ruins of towns and cities which had been built above it, Heinrich Schliemann never lost his purpose to find Troy.

He had a hard life in the years between, a life that would have halted most boys in their purpose. His mother died, leaving seven children. The family lost the little money they had, and young Hein-

rich, instead of continuing at school, was working at the age of fourteen in a grocery store, where his hours began at four in the morning and lasted till the end of a long evening. But he did not forget his dreams of Greece and the city of Troy. The bitterest thing in leaving school had been that he lost his chance to learn Greek.

One evening there came to the store a man who had been well-educated, but whose love for drink had brought him to poverty. In his conversation the fact came out that he knew Greek. The boy begged him to say some Greek to him, and the man began and recited one hundred lines of Homer's poem.

"Although I did not understand a syllable," writes Schliemann, "the melodious sound of the words made a deep impression upon me, and I wept bitter tears over my unhappy fate. Three times over did I get him to repeat to me those divine words, rewarding his trouble with three glasses of whisky, which I bought with the few pence that made up my whole wealth. From that moment I never ceased to pray God that by His grace I might yet have the happiness of learning Greek."

The boy's life grew harder and harder until his health broke under it. No longer useful as a grocer's clerk he went to Hamburg where he tried to get other work. He shipped as a cabin boy for South America, but the vessel on which he sailed was

wrecked on the Dutch coast. Schliemann drifted for nine hours in a small boat and was then picked up. He became an office boy in a warehouse, and began to build the foundations of his future. His days he put into his work, succeeding so well that he soon had a business of his own which prospered greatly. His evenings and every spare minute he could get he spent in learning languages, French, English, Russian, and finally Greek. He confesses that he kept Greek until the last, knowing that it would be likely to tempt him away from his business. He had resolved to gain wealth before he set out on any travels.

When he was a man of forty-six he made his first visit to Greece. In April, 1870, he turned up the first shovelful of earth at the spot where after years of study he had decided the ancient city of Troy was most likely to be. This was on a hill by the name of Hissarlik. He began at the top of the hill, and had his men dig down. Sixteen feet below the top level a wall was found. Was this Troy? No, this was a common wall of comparatively recent date. The digging went on and on. As fast as they uncovered one layer of buildings and thought they were done, more digging revealed a layer below that.

Dr. Schliemann's living conditions were uncomfortable in the extreme. He and his wife lived in miserable quarters in the poor village near by. It was bitterly cold on the "wind-swept plain of

Troy," as it had been in Homer's time. In the daytimes they could keep moving and not suffer too much in the sunshine. "In the evenings," he writes, in the account of his work, "we had nothing to keep us warm except our enthusiasm for the great work of discovering Troy."

The deeper Dr. Schliemann excavated, the more he marveled. One buried town after another was found. Hundreds of thousands of tons of débris were either dug through or carted away. But no city which they discovered showed signs of the wealth which should belong to Troy; no walls appeared to be of that ancient period.

At last he came upon an ancient gate, older than any building that had been uncovered. Quite close to it, he himself discovered the first sign of treasure. It was midday when he found it, mixed in a pile of débris. He sent his workmen to their dinner, for which they departed readily enough since they had not seen what he had found. Then he cut away the débris, and he and his wife saw the first specimens of the "Great Treasure," as it was later called. Here were golden cups, silver goblets, ornaments, and rich weapons. Piece by piece he drew out the rich finds and gave them to his wife, who concealed them under her cloak and carried them to a place of safety. This was a treasure such as no ordinary town would have contained. Here were

the signs of the palace of a king. A civilization such as man had hardly dreamed of was here revealed, and a wealth which went beyond all fabled accounts.

It was years before the groundwork of Troy was laid bare, years in which Dr. Schliemann met many difficulties. His funds gave out. He could not get government permission to continue his excavations. Other scholars ridiculed the idea that there was a real Troy, declaring that it was only a fabled city. But in the end his faith was justified. It was possible to trace out, according to the records in the poems, the walls of King Priam's palace and the scenes of Homer's storied happenings.

"I will find Troy," the boy had said, and he did find an actual city, which was famous in ancient times for three thousand years, but which had been so buried during the intervening centuries that even the memory of it had been lost to the world.

So the poem of Homer became the link between two moments many hundreds of years apart.

In the Valley of the Tombs of Kings

November, 1922

There is a fascination about a deserted house. Story writers choose it for the scenes of their mystery tales. Even the neighbors feel after a few

months or years that there is something different about it. But what of a house that has been closed for thousands of years?

Howard Carter tells us of his feelings when he opened the tomb of the boy-king Tut-ankh-amen which had been closed since the fourteenth century before Christ.

"I suppose most excavators would confess to a feeling of awe—embarrassment almost—when they break into a chamber closed and sealed by pious hands so many centuries ago. For the moment time as a factor in human life has lost its meaning. Three thousand, four thousand years maybe, have passed and gone since human feet last trod the floor on which you stand, and yet, as you notice the signs of recent life around you—the half-filled bowl of mortar for the door, the blackened lamp, the finger mark upon the freshly painted surface, the farewell garland dropped upon the threshold—you feel it might have been but yesterday. The very air you breathe, unchanged throughout the centuries, you share with those who laid the mummy to its rest. Time is annihilated by little intimate details such as these, and you feel an intruder."*

The tombs of the kings and queens of ancient Egypt were like houses in their furnishings. These

*"The Tomb of Tut-ankh-amen," by Howard Carter and A. C. Mace, Doubleday, Doran & Company, Inc.

people believed in a life after death. They pictured another world to which the soul traveled, a world very like this one, in which the soul would need food and drink and wearing apparel and would enjoy the same comforts that had been enjoyed here. Into the hands of a little girl who loved flowers they put a flower, so that she might not miss her favorite blossoms in the strange new world which she was entering. On the walls of royal tombs they painted servants to labor for the king in the after-life, and piles of food which he might eat. His throne chair was set within the tomb, and his chariot, and many of the rich and beautiful treasures of his palace. They made statues of the king, for they believed that each soul had a double, another body which went on into the other world, and that each statue might give the soul yet another chance at life. At least, the way to the other world was long and full of perils. If statues and food and servants and treasures of gold and precious stones would help, they would take all pains to provide for the departing soul the assistance which might be useful.

No one wished to trust his future wholly to others. So kings and queens looked to the building of tombs for themselves, where their subjects might place the treasures which would help them in the world to come.

But these treasures which they accumulated in

their lifetime as a provision for the Great Beyond or which their family and friends placed for them after they had gone, were laid up on earth, not in heaven, and their very richness tempted thieves to break in and steal. No royal tomb has yet been found which had not been despoiled by robbers at some time in its early history. Knowing the danger from thieves, the rulers of Egypt sought to devise ways to secure their treasure. They had secret doors made, with hidden locks; they had secret panels contrived behind which the most precious articles could be stored. Still they knew that the tombs of their fathers were being robbed, and they feared for their own tombs when they should have gone on into the other life.

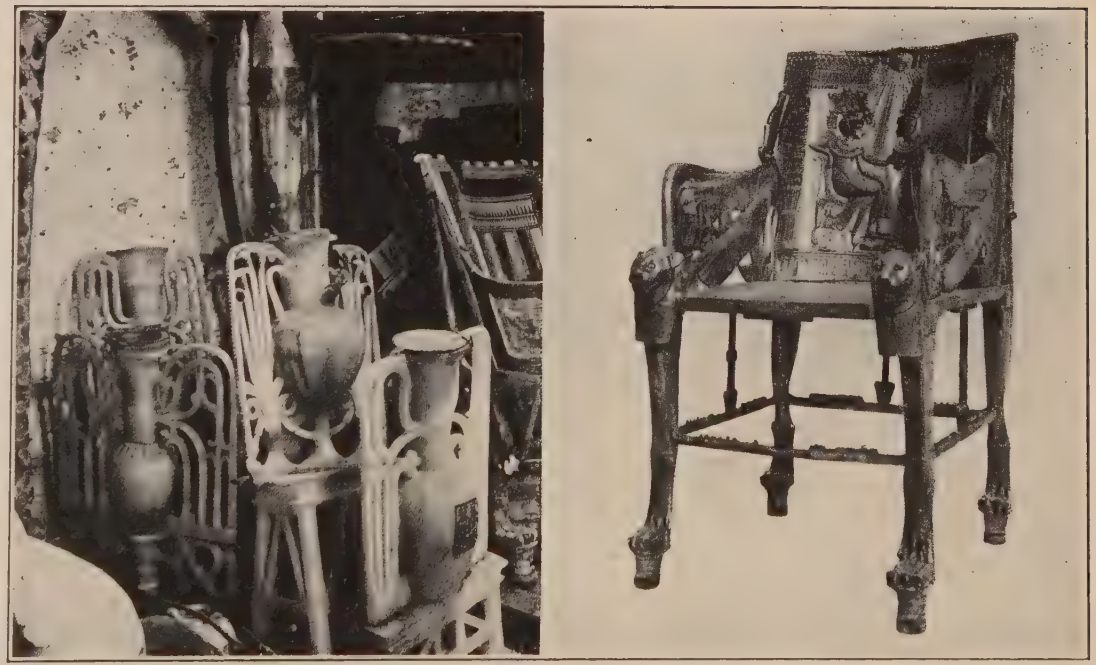
At last a queen hit on a clever solution of the difficulty. She had a fine tomb built for herself at Thebes, and then she sent priests and servants to a remote and desolate valley, there to cut for her a tomb in a secret hiding place far up in the cliffs. There her body was to lie protected and surrounded by its treasures, while her people would think that it lay in state in the beautiful temple-tomb at Thebes.

That was the beginning of the Valley of the Tombs of Kings, where the tomb of King Tut-ankh-amen was found in 1922 and many other royal tombs have been discovered. There were other hiding places for royal mummies. Sir Gaston Mas-

By permission of Howard Carter

AT THE DOOR OF THE TOMB OF KING TUT-ANKH-AMEN

Howard Carter and Lord Carnarvon are ready to enter the long-sealed tomb



By permission of Howard Carter.

TREASURES IN THE BOY-KING'S TOMB

Left: Alabaster vases as they were stored in the antechamber
Right: The beautifully carved throne chair from which he ruled Egypt

pero located in 1881 a cave, far underground, which Arabs had discovered and were pillaging, where amid a glitter of gold and color were hidden the mummies of nine queens, a prince and a princess. But the Valley had yielded the greatest treasures.

Howard Carter and Lord Carnarvon believed that there were still tombs to be discovered in spite of the rich finds that had already been made. Many doubted it. But with the patience of the scientist they kept on excavating. Years went by. They had kept parties of workmen digging for six long seasons without results. Lord Carnarvon was in England. But Mr. Carter was beginning in November, 1922, a last season, hoping against hope to find some reward.

"And then," writes Carter, "hardly had we set hoe to ground in our last despairing effort than we made a discovery that far exceeded our wildest dreams. Surely, never before in the whole history of excavation has a full digging season been compressed within the space of five days."

Work was begun in the spot of their choice on the first day of November. On the morning of the fourth, when Mr. Carter arrived at the scene, he realized by the silence that something had happened. A step cut in the rock had been found, and the men were waiting for his direction as to how to proceed. This was good news, but might mean only a sunken stairway. For two more days they dug

feverishly, finding and uncovering the rest of the stairway. Toward sunset on the afternoon of November fifth they came to a sealed door. The seals were of an ancient date and bore royal marks. Through a peep-hole which he made, Carter was able to satisfy himself that the front chamber was full of stones and other matter, which showed that this was an unopened and unexplored tomb.

He cabled to Lord Carnarvon: "At last have made wonderful discovery in Valley; a magnificent tomb with seals intact; re-covered same for your arrival; congratulations."

It took Lord Carnarvon a fortnight to arrive from England. Meanwhile everything was gotten in shape for the great day of opening the sealed door and entering the chamber.

On the twenty-sixth of November the party gathered for the event. A hole was made in the door, and Carter peered in. At first he could see nothing, but as his eye became accustomed to the light, he began to perceive an accumulation of articles, statues, animals, gold, furniture, vases.

"For the moment," he says, "an eternity it must have seemed to the others standing by—I was struck dumb with amazement, and when Lord Carnarvon, unable to stand the suspense any longer, inquired anxiously, 'Can you see anything?' it was all I could do to get out the words, 'Yes, wonderful things.'"

We have quoted his description of the sense of awe with which they entered this long-deserted house of death. "That is perhaps the first and dominant sensation, but others follow thick and fast—the exhilaration of discovery, the fever of suspense, the almost overmastering impulse, born of curiosity, to break down seals and lift the lids of boxes, the thought—pure joy to the investigator—that you are about to add a page to history, or solve some problem of research, the strained expectancy . . . of the treasure-seeker."

The tomb proved to be one of the richest ever found. Antechambers full of rich articles were only the preparation for the splendor of the inner room where lay the body of the boy-king, who had ruled in Egypt in the fourteenth century B. C. The whole world of art and history will share forever in the wealth unearthed in this long-hidden treasure-house of the past. Its discovery was a crowning moment in that series of adventures which mark man's effort to know to the full his past as well as his present.

The explorer of new lands and trackless oceans seeks by his journeyings to bridge space; the archaeologist seeks by his exploration to bridge the gaps of three and four thousand years of time.

THE POLES AT LAST

Peary at the North Pole
With Scott and Amundsen
Flying over the Top of the World

THE POLES AT LAST

Peary at the North Pole
April 6, 1909

ARCTIC exploration is exploration raised to the *n*th degree. The man who undertakes it is an explorer, pure and simple. He has no mixed motives. The desire for trade does not enter into his picture. He has none of Sinbad the Sailor's love of seeing strange peoples. Restlessness, curiosity, and even the love of adventure can be more easily satisfied in other ways. He is a man set for a task. Something in his own soul drives him forth into the waste regions of the world. As Robert Peary put it, "To me the final and complete solution of the Polar mystery . . . is the thing which it is intended that I should do, and the thing that I must do!"

"Great physical hardihood and endurance, an iron will and unflinching courage, the power to command, the thirst for adventure, and a keen and far-sighted intelligence—all these must go to the make-up of the successful Arctic explorer," wrote Theodore Roosevelt in his Foreword to Peary's book, "The North Pole." Peary had them all.

He had trained for his task as a runner trains for a race. Again and again he had led expeditions into the Arctic, nearer, nearer, nearer to his goal. He had made a record in his "Farthest North" and then gone farther north still, beating his own record. He had met heart-breaking disappointments. Fate had seemed to snatch the prize from him again and again, when it had seemed that he must succeed. But he turned every failure into a lesson in the bitter school of Arctic exploration. He made a science of his life's task. Twenty-two years of self-training lay back of the moment when he stood on the spot

> Where no man comes,
> Or has come since the making of the world.

There was danger up to the day of victory. Only a master in the grim business of Arctic travel could have compassed the final dash for the Pole. There was shifting ice to be crossed, almost within sight of the goal, and "a man," writes Peary, "who should wait for ice to be really safe would stand small chance of getting far in these latitudes. . . . Often a man has the choice between the possibility of drowning by going on or starving to death by standing still." Peary went on.

"On, on we pushed," he writes in his story of the final five-day spurt which he and four companions made after the last supporting party had

been left behind,* "and I am not ashamed to confess that my pulse beat high, for the breath of success seemed already in my nostrils."

The last march northward ended at ten o'clock on the forenoon of April sixth. With the Pole in sight he was too weary to take the last few steps to reach it. At 88° 57″ N. they made camp, ate, and slept, and rose to make the great achievement. "If it were possible," he says, "for a man to arrive at 90° N. latitude without being utterly exhausted, body and brain, he would doubtless enjoy a series of unique sensations and reflections. . . . It is a wise provision of nature that the human consciousness can grasp only such a degree of intense feeling as the brain can endure, and the grim guardians of earth's remotest spot will accept no man as guest until he has been tried and tested by the severest ordeal."

Rested by their sleep, strengthened by food, they circled the Pole, allowing a distance of ten miles for possible error. Then at the spot itself they planted their flags and took possession in the name of the American nation. Standing at this point, Peary's scientific mind took in to the full the strangeness of his position. "Nearly everything was too strange to be realized. One of the strangest of those circumstances was that in a march of only a few hours I had passed from the western to the

*Reprinted by permission from the "North Pole: Its Discovery in 1909," by Robert E. Peary. Copyright, 1910, by Frederick A. Stokes Company.

eastern hemisphere and had verified my position at the summit of the world. . . . East, west, and north had disappeared for us. Only one direction remained and that was south. Every breeze which could possibly blow upon us, no matter from what part of the horizon, must be a south wind. Where we were, one day and one night constituted a year, a hundred of such days and nights constituted a century. Had we stood in that spot during the six months of the Arctic winter night, we should have seen every star of the northern hemisphere circling the sky at the same distance from the horizon, with Polaris (the North Star) practically in the zenith."

Yet in his diary he wrote these words, words which might be echoed in lesser degree by every explorer, every man who has set for himself a goal and finally achieved it. "The Pole at last. The prize of three centuries. My dream and goal for twenty years. Mine at last! I cannot bring myself to realize it. It seems all so simple and commonplace."

In thirty hours Peary left the Pole. "One backward glance I gave—then turned my back toward the south and toward the future."

We glory with Peary in his conquest of the Arctic. But is it not a greater sign of the spirit which was within him that made him throw himself five years later, at the beginning of the World War, into the fight for the promotion of aviation? He had fulfilled

the great vision of his own life, but he was ready to catch a new vision of a future in travel and exploration, the fulfillment of which he would not live to see. He set himself to make the Army and the Navy, Congress and the American people, realize what was before them. "There is a new art in the world to-day," he told them, "the art of flying. A new world to conquer, the world of the atmosphere. A new ocean to navigate and utilize, the ocean of the air, whose only coasts are infinite space." Master of the old methods of exploration, he saluted with enthusiasm the new.

With Scott and Amundsen
1911–1912

"Man cannot claim mastery of the globe until he conquers the Antarctic continent," says Richard Byrd. "Science is the loser so long as there remains a large unexplored area left in the world."

The Antarctic region, one and one half times the size of the United States, is the last great challenge to the exploring spirit of mankind, as he surveys the globe which he finds it now an easy matter to encircle on many known routes. It will never be easy to circle the globe in the great Frozen South. A great ice-pack belt, sometimes hundreds of miles wide, guards the approach to the southern continent. Captain James Cook sailed towards this ice

barrier in 1774, stopping only when he could not go an inch farther. Admiral Wilkes of the United States Navy discovered the Antarctic land continent in 1840. Captain Robert Falcon Scott of England made in 1902 the first real exploration of the land beyond the barrier, reaching a chain of mountains surrounded with giant glaciers and "proving," as he says, "first-hand that the climate was the coldest on earth, its winds insufferable, and its glacial crevasses incredibly hazardous." In 1907–1909 Sir Ernest Shackleton went six degrees farther south than any man had ever been and came within ninety-seven miles of the South Pole.

Such was the preparation for the Antarctic expeditions of 1910–1911 which resulted in the reaching of the South Pole by the Norwegian explorer, Roald Amundsen, on December 14, 1911, and by Scott and his party a month later, on January 17, 1912.

Amundsen, a seasoned explorer in the Arctic regions, had made all his preparations for a North Pole expedition and was on his way when the news came of Peary's achievement. He turned his ship southward to repeat at the bottom of the world the success that had been achieved at the top. The story of his dash for the South Pole is a record of careful planning and scientific exploration. The winter of 1911 was spent in establishing a base camp on the Bay of Whales and depositing at selected

spots caches of food which would be used on the final journey. On April 22 the sun disappeared, and the party settled down to wait through what is the Antarctic winter until on August 24 it reappeared and active preparations could begin. By the middle of November the great ice barrier was crossed, and they were on land, but mountainous land, the crossing of which occupied them for many days. At last they came to the downward slope on the other side of the mountain ranges. The sleds ran easily. Seventeen miles a day were covered. On December 11 observations showed them to have reached 89° S. The last degree was all that lay between them and their goal.

"December 14 dawned," writes Amundsen. "It seemed to me as if we slept a shorter time, as if we ate our breakfast in greater haste, and as if we started earlier than on preceding days. As heretofore, we had clear weather, beautiful sunshine, and only a very light breeze. Not much was said. I think that each one of us was occupied with his own thoughts. Probably only one thought dominated us all, a thought which caused us to look eagerly towards the south and to scan the horizon of this unlimited plateau. Were we the first, or——?

"The distance calculated was covered. Our goal had been reached. Quietly, in absolute silence, the mighty plateau lay stretched out before us. No other man had ever yet seen it; no other man had

ever yet stood on it. In no direction was a sign to be seen. It was indeed a solemn moment when, each of us grasping the flagpole with one hand, we all hoisted the flag of our country on the geographical South Pole."

Amundsen and his four companions returned in safety to their camp, and received the honors of the world.

The Scott party had spent the year four hundred miles from the Amundsen camp, on the mainland to the west. They had known of the arrival of the Norwegians, but each group had proceeded according to its best possible schedule, realizing that safety in the hazardous journey depended on the most careful preparation. Scott had had bad weather, and was followed by it almost throughout the trip. He proved the region to be, as Sir Douglas Mawson had called it, the "Home of the Blizzard." The story of the journey of his party of five men is written in Captain Scott's Diary, a wonderful record of triumph at every step over distance and danger. They, too, reached the vast plateau in which the South Pole is located, and, looking out on it, saw a black flag. A nearer view showed that it was tied to a sledge bearer, and that near by were the remains of a camp. This told the story. After thirteen years of work in the Antarctic Continent, Captain Scott had been forestalled by a month in arrival at the Pole. On Wednesday, January 17,

they reached their destination. "The Pole," writes Scott. "Yes, but under very different circumstances than those expected. We have had a horrible day. Head wind, with temperature 22 below zero, and companions laboring on with cold feet and hands . . . Now for the run home of 800 miles and a desperate struggle. I wonder if we can do it."

The diary from this point on is a heart-breaking record of difficulties bravely met. All the men suffered intensely from the cold, particularly from frost-bitten or frozen feet. The storms continued. Lieutenant Evans died. "God help us," wrote Scott in his diary. "We can't keep up this pulling, that is certain. Amongst ourselves we are unendingly cheerful, but what each man feels in his heart I can only guess."

A second member of the party, Oates, who had suffered terribly from his feet, knew that he was near the end, and, rather than delay the party, walked out from the tent into the blizzard to his death. Food had been cut to smaller and smaller rations. Starvation or freezing or both were inevitable—and still Captain Scott wrote bravely on. The last entry is on March 29.

"Since the 21st we have had a continuous gale from W.S.W. and S.W. We had fuel to make two cups of tea apiece, and bare food for two days on the 20th. Every day we have been ready to start for our depot 11 miles away, but outside the door of

the tent it remains a scene of whirling drift. I do not think we can hope for any better things now. We shall stick it out to the end, but we are getting weaker, of course, and the end cannot be far.

"It seems a pity, but I do not think I can write more.

"R. Scott.

"Last entry

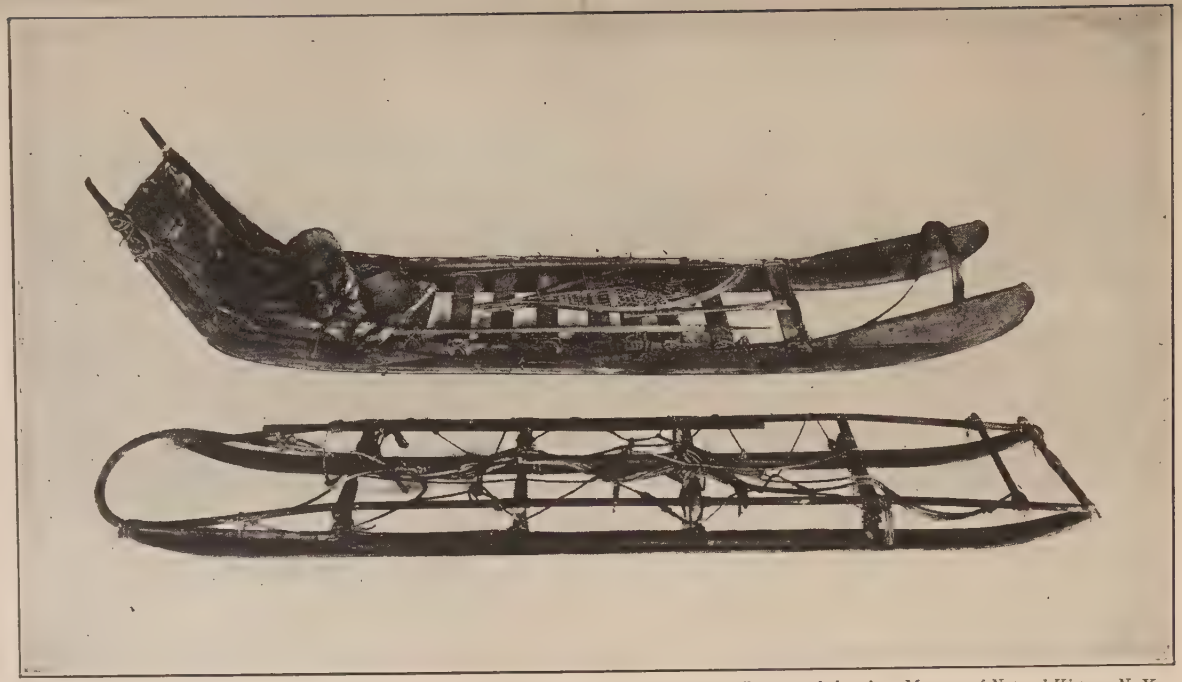
"For God's sake look after our people."

In all the letters which Captain Scott wrote in those last days and left with his notebooks in the cairn where the bodies of the three men were discovered many months later by a rescue party, was the reference to his wife and boy. The care of his family was all that weighed on his mind in the last days. For himself, in his letter to her he wrote the last words of the true explorer: "I die at peace with the world and myself—not afraid."

Flying Over the Top of the World

May, 1926

"On May 9, Lieutenant-Commander Richard Evelyn Byrd, of the United States Navy, piloted by Floyd Bennett, set out from Spitzbergen in a Fokker airplane with three motors, in the early morning, circled the Pole, and returned to his starting place in the afternoon, the time of the flight being fifteen and a half hours."—Associated Press dispatch.



Courtesy of American Museum of Natural History, N. Y.

By Sledge to the Poles

Above: The sledge that reached the North Pole with Peary
Below: The sledge that reached the South Pole with Amundsen

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COMMANDER BYRD'S PLANE "AMERICA"

The new way of exploration

"On May 12, Roald Amundsen, with seventeen companions, flew over the North Pole in the airship *Norge*, starting from Spitzbergen on one side of the world and landing in Alaska on the other after seventy-one hours of flight."—Associated Press dispatch.

Peary was out of touch with civilization for four hundred and twenty-nine days. It was five months after the day of his arrival at the Pole before the news of his achievement reached the world. Commander Byrd made his non-stop trip to the Pole and back in a single day; the news of Amundsen's journey across the top of the world was reported by radio from his airship and printed in the newspapers of the world on the following day. Truly the world had changed in less than twenty years.

But was it as simple as the dispatches would make one believe? Read Byrd's account of the life which trained him for his great moment of victory, of the preparations for the trip, and of the dangers which threatened it at every instant, and you will see those fifteen and a half hours with a year of effort packed into it. Even the hours themselves were significant in every minute as it passed. There was the broken sextant, which threatened to throw them off their course, and the leaking oil tank which might end the journey at any moment.

"I was too busy with my sextant and compasses and chart to be philosophical. But always in the

background was the feeling that we had gone out into the unknown without the proper spiritual equipment," wrote Byrd on his return. "We had every item of material apparatus that human ingenuity could devise for our safety. But the hazy doubts that clung to the fringes of my consciousness were constant reminders that there was more to all this adventure than just the feat of flying a long way over the ice."

The navigation, with no landmarks on the ice, was like steering a course over the ocean, guiding the way by the sun, stars, and moon.

As they came into areas never before seen by men, they were lifted for the moment out of the consciousness of their machine. They had been aviators; now they were explorers, feeling the thrill of sighting virgin territory.

At 9:02 A. M., May 9, 1926, calculations showed them to be at the Pole. They headed to the right to take two confirming sights of the sun, then turned and took two more. They took some moving and still pictures, and then went on for several miles and made a great circle to be sure that they took in the Pole.

"A non-stop flight around the world" they called this brief surveying trip which they made in a few minutes, for they knew that for them all ordinary measures of time and direction were set at naught. At the top of the world they could look

in no direction save south, and they had gone beyond the man-reckoned measure of twenty-four hour days.

But even here they could not stop long to reflect. They must make their way back to that little island of Spitzbergen to the south, the attainment of which meant safety and success. That they were able to guide their course accurately back to the point of starting was in itself an achievement of no mean scientific skill and value.

Three days later Amundsen and his companions left Spitzbergen in the morning and sighted Point Barrow, Alaska, in forty-two hours, crossing the Arctic Ocean, from continent to continent, dropping flags at the Pole as they passed over it.

How did they feel, these men who had accomplished the impossible, these men of the New Age of man's conquest over the world? Commander Byrd cabled this message back to the United States.

"The elements were surely smiling that day on us, two insignificant specks of mortality flying there over that great, vast, white area in a small plane . . . speechless and deaf from the motors, just a dot in the center of ten thousand square miles of visible desolation. We felt no larger than a pinpoint and as lonely as the tomb, as remote and detached as a star.

"Here, in another world, far from the herds of

people, the smallness of life fell from our shoulders. What wonder that we felt no great emotion of achievement or fear of death that lay stretched beneath us, but instead, impersonal, disembodied? On, on we went. It seemed forever onward.

"Our great speed had the effect of quickening our mental processes, so that a minute appeared as many minutes, and I realized fully then that time is only a relative thing. An instant can be an age, an age an instant."

Time and Space—by these the man of the Old Age was limited; over these the explorer of the New Age is giving him a vision of victory.

THE QUEST OF SCIENCE

THE VOYAGE OF THE "BEAGLE"
MAKING FRIENDS WITH THE NORTH
UNDERSEAS EXPLORATION
THE FINDING OF THE DINOSAUR EGGS

THE QUEST OF SCIENCE

The Voyage of the "Beagle"
1832–1836

IN THE tent of Robert Falcon Scott, Antarctic explorer, on his first long expedition to the Frozen Continent, there was one book, Darwin's "Cruise of the *Beagle*." In the long winter days, when life seemed hardly worth living and a return to civilization looked but a vain hope, the members of the party would take turns reading aloud from it. Not until frozen fingers prevented the turning of the pages did they stop their daily reading of this, their one, their chosen book.

Charles Darwin won their hearts and held their interest because he was a man of like passions with them. Others had spent years, as they had, in the southern hemisphere, sailing up and down its seas, visiting its strange islands. But he, like them, was an explorer. His exploration was, however, more than a physical one. He was searching into the field of life as it had been lived for thousands of years upon the earth; he was adventuring into the realms of thought. "I have been speculating," Darwin once wrote, "what makes a man a dis-

coverer of undiscovered things; and a most perplexing problem it is. Many men who are very clever—much cleverer than the discoverers—never originate anything. As far as I can conjecture, the art consists in habitually searching for the causes and meaning of everything which occurs."

It was a singular and gracious Providence that placed this lad of twenty-two as naturalist on board the government ship, the *Beagle*, which was off on a cruise around the world in which the southern hemisphere was to be as thoroughly explored as was possible. The trip had been planned as a two-year voyage. It lasted five years. In that time Darwin laid the foundation for the theories which made him one of the world's outstanding figures. The journal which Scott and his men found such interesting reading covered his daily observations for those five years.

The unscientific landsman, who knows little of the life which Darwin so painstakingly observed and studied, cannot go far in appreciation of the investigations which set his mind to thinking on the great processes of life and their essential unity. But he can appreciate the charm and interest of the detailed accounts of everything which he observed, from volcanoes to cannibals, from spiders to blind fishes, from coral reefs to mountain tops. The stopping places in the vessel's long itinerary have a sound of magic, Tierra del Fuego, Straits of

Magellan, Concepción, Valparaiso, Chile, Coquimbo, Galapagos Archipelago, and the rest. Sea travel in itself Darwin did not enjoy. Few of us would have enjoyed it amid the discomforts of five years' residence on such a ship as this cruiser of a hundred years ago. But the exploration of the globe was a delight to him. "The map of the world ceases to be a blank," he says; "it becomes a picture of the most varied and animated figures." The isolation gave him time to think and to develop along his own lines, as he could not have done in the community life of his Cambridge college. "The truth," he writes, in a letter to a friend, "will not penetrate a preoccupied mind."

It was ten years before the results of the voyage were all in form to print, and ten more years before the book which startled the world into new thinking, "The Origin of Species," was published. But the cornerstone of his work was laid in those years at sea. Darwin had to become a discoverer of the facts of plant and animal life as it was lived all over the world before he could use his power as a thinker to shape those facts into a new picture of life and its ways. Discoverer, then thinker on what he had discovered—this was the process of Darwin's mental life.

Darwin's was the first of many voyages which had as their purpose the scientific study of the world's treasures. Such expeditions are going on to-

day in many quarters of the globe. Man will never be satisfied with having merely covered the world's land and water areas. He must come to understand not only his own life but that of every living creature on the earth's surface. Then and then only will he have explored the world to his satisfaction.

Making Friends with the North
Twentieth Century

To survey a region from the air, or even to travel across it on the way to some destination is only one part of exploration. The scientist is never content to stop there. Darwin would have scorned the modern mania for racing around the world on the fastest ships and trains in an effort to break the world's speed record. Five years were all too short for his purpose. He could have spent a lifetime on the journey and never wearied in his quest.

The Far North acted for centuries as a magnet, drawing men of the temperate zones into the adventure of its exploration. Yet for each brave party that went forth into the great adventure there was always a goal. The Northwest Passage must be discovered, the land and water must be surveyed and charted, the North Pole must be reached. The lure of the unknown was upon all these men.

And then there came back from the Arctic a man who talked not of the "Frozen North," but

of the "Friendly Arctic," a man who had lived for years in regions where other white men had died of exposure and starvation, a man who came back only to return again because he had made friends with the North. Men marvelled at Vilhjalmur Stefansson when he returned from his early expeditions with tales of the comfort in which he had dwelt in Eskimo villages and of the ease of travel and life as he adopted in the North the ways of the people of the North. But as the years have gone on, and others have followed in his ways, this explorer has made the world believe in the North as he sees it, a friendly, hospitable, livable country, rich in many of the treasures that men seek, in which the lure of the known will prove in future years as great as has the lure of the unknown in past centuries.

Stefansson claims nothing for himself, save the old, old method of "living in Rome as the Romans do." Read his simple account of his arrival at the village of a tribe which had never before seen a white man or touched civilization. He had learned a little of their language from neighboring people. So he went among them with the power of understanding their speech and making them understand his. As he and his guide approached, it was thought at first that they were spirits. As soon, however, as the people were assured they were only friendly visitors, the utmost cordiality was shown. Each

man of the tribe came up with the words: "I am So-and-So. I am well disposed. I have no knife. Who are you?" The men set about building a camp for their guests, while the women hurried away to prepare food. When the meal was ready, Stefansson was invited to the home of one of the leading men. The wife's questions, he says,* "were not of the land from which I came, but of my foot gear. Weren't my feet just a little damp, and might she not pull my boots off for me and dry them over the lamp? Would I not put on a pair of her husband's dry socks, and was there no little hole in my mittens or coat that she could mend for me? She had boiled some seal-meat for me, but she had not boiled any fat, for she did not know whether I preferred the blubber boiled or raw. They always cut it in small pieces and ate it raw themselves; but the pot still hung over the lamp, and anything she put into it would be cooked in a moment. When I told her that my tastes quite coincided with theirs—as, in fact, they did—she was delighted. People were much alike, then, after all, though they came from a great distance."

In such simple fashion did the man of the twentieth century, despite his background of civilization, fit into the life of a people who lived and thought after the fashion of a past so far back

*"My Life with the Eskimo," by Vilhjalmur Stefansson. The Macmillan Company.

that it had been lost in the mists of the days before history. "These were not such men as Caesar found in Gaul or in Britain; they were more nearly like the still earlier hunting tribes of Britain and of Gaul living contemporaneous to but oblivious of the building of the first pyramid in Egypt. They gathered their food with the weapons of the men of the Stone Age, they thought their simple, primitive thoughts and lived their insecure and tense lives—lives that were to me the mirrors of the lives of our far ancestors whose bones and crude handiwork we now and then discover in river gravels or in prehistoric caves. . . . Here were not remains of the Stone Age, but the Stone Age itself, men and women, very human, very friendly, who welcomed us to their homes and bade us stay."

Stefansson stayed. He went back again and again. He adopted, as did Peary, the Eskimo ways of hunting, fishing, and traveling. He built snow houses like theirs and lived in them during the periods of intense cold. He refused to accept the word of the natives that certain regions had no living creatures which would serve as food, and dipped below the ice into the Polar sea or cut beneath it to the land, finding food sufficient for his needs.

The first stage of Polar exploration, says Stefansson, was that when men like Henry Hudson sailed into the Arctic waters in summer, and got away

if they could before winter came, thinking the cold winter unendurable to white men. The second stage came when later explorers braved the terrors of the winter and made land journeys amid great hardships. Peary represents the third stage, when skill in Arctic life had made long journeys possible but the menace of starvation from scarcity of food was ever with them. The fourth stage of which he himself was the brilliant pioneer, was that of living off the country and making it serve his every need.

To endure life in the Arctic for the sake of a purpose is the way of the conqueror. To enjoy life in the Arctic is the way of the victor. The one has subdued an enemy, conquered a hostile and opposing force; the other has adventured in a test of skill and strength and come out with a joyful mastery. The North could never be fully possessed by man while he regarded it as his enemy. Only as this region becomes the "Friendly Arctic" will man's possession of it be complete.

Underseas Exploration
Twentieth Century

To leave one's own world behind and enter into another world is an experience that can befall few persons during a lifetime. Yet such is the adventure in exploration undertaken by scientists who put on

diving apparatus and descend to the bottom of the sea for long hours of study of the life which exists there.

These men are not simply divers. One can imagine a diver, dropping down twenty, thirty, or forty feet into the water to get pearls, or to work on the machinery of a sunken submarine, without much consciousness of what was going on about him in the water in which he worked. He would be on a definite errand, and his mind would be centered on its accomplishment. Any sensations attendant on his under-water experience would be of interest to him only as they affected his efficiency in his work. But the scientist goes down with a different purpose. He is an explorer. He is entering Fish World to study fishes. He is leaving behind the world of air and direct sunlight to become, as one scientist put it, "a fish among fishes," a dweller in a world of water. It is not merely a physical immersion in water that he is undergoing. He is experiencing, by physical activity and by the utmost use of his imagination, the sensations of a dweller under water, so far as one who is normally an air dweller can experience them. He is entering, in so far as it is humanly possible, another world from that of his normal life. To the man of trained mind and vivid imagination who puts himself in this place come rich rewards of insight and understanding, such as he never experienced when peer-

ing into the water from above. Fortunately, the men who undertake this adventure are trained in the art conveying to others the sensations which they experience. As they can put themselves into Fish World and enter to a certain extent into the experience of a fish, so they can put themselves back into our world and describe their feelings during the process.

Dr. Longley spent the greater part of a summer exploring the coral reefs at the Tortugas in Florida, sitting, standing, walking, taking photographs, living for hours at a time underseas. He describes how water seems when it is substituted for our familiar surrounding atmosphere of air. "The water is no longer colorless, crystal clear, and unsubstantial. Darkening with depth, its soft tints are all pervasive. It blurs and softens every outline. Except when the light is strongest and it is itself most free from sediment, it denies one sight of all but immediate surroundings, and resolves one's world into a diminutive hollow hemisphere, filled with silence, and on all sides fading into nothingness. . . . One has mingled sensations upon going down for the first time among the marine creatures, even in water no deeper than ten or fifteen feet. It is only upon rare occasions that one can see even indistinctly under water for more than fifty feet, and commonly the visibility is much lower than that statement implies. . . . One is likely to

UNDERSEAS EXPLORATION

To enter Fish World is to adventure in a new field of exploration

Courtesy of American Museum of Natural History, N. Y.

When Giant Creatures Walked the Earth

Explorers of the past think nothing of going back ten million years in history

experience a feeling of complete isolation which is by no means enjoyable. For one is not only isolated, but clumsy and essentially helpless. The strange, exotic beauty of one's surroundings inspires one, however, and offsets any feeling of uncertainty and unrest one may have as to what lies at any moment just beyond the range of vision. The horizon is so near that the blue canopy of heaven seems no larger than a tent, but a tent within whose confines may lie a veritable fairyland."

One of the things which Dr. William Beebe, one of our leading underseas explorers, found it most difficult to realize was that he was actually wet. When he was in the water, wetness was so much a part of the experience that he had to feel himself, and to look at the wrinkles on his fingers in order to convince himself that his body was really immersed in water.

Underseas explorers go below the surface of the water in order to study the life there. The first requirement is to find out how to disturb that life as little as possible, so that it will go on as if there were no strange human figure from a world of air sitting or standing in the midst of the Water World. Dr. Beebe reports a curious reversal of what happens when one is training one's self for Nature observation in the woods or fields. In the world of water everything moves. There is a constant rhythmic swaying of plant life, and a shifting hither and yon of fish

life. The human being who resists the movement of the water and holds himself still attracts attention and so defeats his purpose of being inconspicuous. In the woods he should do his utmost to avoid movement; in the water he should take equal pains to yield himself to it.

The transfer of one's life from one zone of experience to another is never without its hazards. Man must have air. But underseas his only supply of this life necessity is through a slender rubber hose. No matter how carefully the helpers in the boat above are doing their part, there is always the danger of accident. Then, too, while the smaller creatures of Fish World are in the main harmless, there are larger denizens of the deep which may appear at any moment and attack the intruder.

Observation under these conditions requires steady nerves. Attempts at photography under water multiply the difficulties a hundredfold. The brightness of sunlight is so reduced by filtering through even fifteen feet of water that high explosives must be employed for flashlight snapshots. The photographer must wait for minutes or hours until his would-be subjects are satisfactorily posed. He must be on the alert every instant to be ready for that moment. Then he must instantaneously set off the machinery which will not only take the picture but discharge a pound of magnesium pow-

der to light up brilliantly the scene about him. So dazzling is this explosive at the surface of the water that it was found necessary to move the boat in which the helpers watched to a considerable distance from the spot directly over the diver. At least the photographer knew when he was about to take the picture and could prepare himself for the shock. But to them it came with no warning after they had been sitting for hours awaiting it. Once, with Dr. Longley, the powder was discharged prematurely, and only the fact that part of it failed to ignite saved him from fatal injury or permanent blindness.

Exploration is never without its dangers. That is part of its appeal to brave men. All honor to the men of science who are willing to make repeated journeys into Fish World in order to come closer to the reality of life as it is lived at the "Edge of the Edge of the World!"

One would think that day and night would be much alike underseas, but Dr. Longley notes a distinct change in the activity of many of the creatures. Apparently there are night feeders and day feeders even as there animals that never appear in the forests save at night. This is part of that great mystery which the explorer seeks to fathom and understand. "I am always impressed," he says, "by the mystery of the sea."

The Finding of the Dinosaur Eggs
1923

Tens of thousands of thousands of years ago, in one of the ages when the world was in the making and life was beginning to set itself up on this planet, there was a time when huge creatures of the reptile family ruled the world. Life had begun, so the scientist tells us, in the water, and had gradually come out into the air and climbed on land. Then, in the period when all our great coal deposits were being formed, life established itself on land. The first of the land creatures probably returned to the water to lay their eggs, but gradually the race of land creatures so adapted itself to its new life that a shell was grown around its egg, protecting it from the open air.

Life flourished on land, and a race of enormous creatures stalked across it, "terrible lizards"[2] as the name *dinosaur* means, some of them as tall as trees and one hundred feet long. And of all the parts of the earth where they lived, none was more comfortable to them nor more thickly settled by them than the great continent of Asia and the region of Central Asia, known to science as "the mother of continents."

How do we know of this Age of Reptiles? By what magic can we look back into a past far, far

back of the origin of man, and picture and describe the creatures who ruled the earth in those days as man rules it now?

By the magic of exploration, which delves into rocks and desert sands and finds the bones of these creatures as they lie buried, takes the fragments, the broken pieces, and puts them together, and builds for us a race of creatures which it describes as accurately as we could describe a horse or a dog; by the work of men like Charles Darwin, and Henry Fairfield Osborn, and Roy Chapman Andrews, who give their lives to this kind of scientific exploration.

We could not have told the story of the dinosaur and its eggs, as we have told it, if Roy Andrews and a party of fellow-scientists had not gone out year after year into the great Gobi Desert of Central Asia, one of the most remote and inaccessible and uncomfortable regions of the earth's surface. To go there is to take a journey away from all the beaten paths into the heart of Mongolia. To travel there is to carry all provisions with you, for food and water are so scarce as to make life impossible of sustaining itself off the country. To journey across it is to travel by camel caravan at a rate of two miles an hour, fifteen or twenty miles a day, if one is fortunate. To stay there for even a few months is to be in danger of freezing from Arctic winds or being smothered by desert sand storms. The Gobi

Desert was evidently a favorite resort for giant dinosaurs, but it will never be popular with human beings.

Thither went Andrews and his party in 1923, seeking the red fossil beds of the Flaming Cliffs, which had been observed in earlier expeditions and selected as a probable source for remains of ancient animal giants.

For four hundred miles the party journeyed across a sun-parched desert to the "Flaming Cliffs" of their destination. Here some of the men had been before and discovered fossils which showed it to be a region where life had been abundant in the days before history. It was surely not abundant now. For a year there had been no rain, and the desert lay brown and white beneath the scorching rays of the sun, with no sign of vegetation to break the unbroken stretches of sand.

But within an hour after their arrival at the Flaming Cliffs, members of the party began to make finds in the sand. Though no life exists there now, abundant life had been there in the far-off past.

On the second day one of the men reported that he was sure he had found fossil eggs. The rest joked him, for such a thing had never been found, but when he persisted in his story, they were sufficiently curious to walk out after luncheon to view his find. Then their indifference vanished, for they knew that they were looking at the first dinosaur eggs

ever seen by man. They could not be birds' eggs, for no birds' skeletons had been found in this region, and the birds known to have existed in this period were too small to lay such large eggs. Moreover, they lay in a great deposit of dinosaur skeletons, where there were the remains of no other animals.

Yet hundreds of skulls and skeletons of dinosaurs had been found in other parts of the world, and never an egg. Scientists had suspected that dinosaurs were egg-laying reptiles, but they had not been able to prove it. Could the three eggs which lay on this ledge be really dinosaur eggs, answering by their presence a question that scientists had been asking for many, many years?

While all the members of the party were on their hands and knees examining these "ten-million-year-old eggs," their discoverer was working a little above them. Gently removing the sand and loose rock, he uncovered, not four inches from the spot where the eggs lay, the skeleton of a small dinosaur. Other eggs, found later in the same region, showed the forming bone structure of a tiny dinosaur within the shell. In five weeks' time the party had collected a series of eggs, baby skeletons, larger skeletons, and full-grown creatures which gave, as clearly as if it were spelled out in print, the life history of the dinosaur, from its eggs which were about eight inches long and seven inches in circumference, to its giant snake-like body with short

legs and long tail. Ten million years had passed since those eggs were laid; and there they rested on the ledge with their pebbled surfaces as perfect as if they had been laid the day before. And from those eggs man could construct a new and important chapter in the history of life on the planet.

The exploration of the future, according to Andrews, will be along these lines. Actual discovery of new regions is necessarily coming to an end. There are few areas of the globe's surface which have not been crossed and re-crossed by the trail of man. These few bid fair to be surveyed and charted within a score of years by men who view them from the air.

But the romance of exploration has, from the point of view of the scientist, only just begun. The surface of the ground has been barely scratched in the Arctic and in Asia for the treasures of mineral wealth which lie beneath. The story of life on this planet as it was lived before and after the advent of man has been only sketched in the histories which begin with the days of comparative civilization. There are tribes hidden away in the less advanced sections of the world which will contribute their share to man's story of his adventure. How do there happen to be blond Eskimos, as Stefansson found them, in the Arctic? And white Indians in the jungles of South America? What tales have buried cities to tell us?

Science has always been the trailmaker for mankind. The adventurer in the more remote parts of the globe still holds that place, and one who reads the tales of his adventures, whether by airplane or caravan, whether in lands inhabited by hostile and unwelcoming natives or in the inhospitable regions of extreme heat or cold, need not fear lest the thrill of adventure has gone out of exploration.

Exploration has always been news. To-day it is more and more frequently "front-page" news.

INTO THE UNKNOWN

Up Mount Everest
On the Wings of the Morning—Lindbergh
Surveying a Continent
Straight Up—and Straight Down

INTO THE UNKNOWN

Up Mount Everest

I

1852

IT WAS a regular working day in the offices of the British Surveyor General of India, Sir Andrew Waugh. Clerks and mathematicians were busy as usual, making up statistics from the facts and figures brought in by their outside staff of workers. There was no more expectation that anything exciting would happen that day than there is to-day in any Government Bureau in Washington or London.

Suddenly the door of Sir Andrew's office was thrown open and his chief mathematician, a dignified Bengali gentleman, rushed into the room, exclaiming excitedly:

"Sir, I have found the highest mountain in the world!"

Mount Everest had been located and identified.

Too far away and too much surrounded by other giant peaks to stand out in its naked majesty for the eye to see, it had passed for a long time in government records under the title of "Peak

Fifteen," simply one of the unnamed peaks located in the survey which was being made from the plains of India. But what the human eye could not see, the scientific instrument of the surveyor could record. This particular record of height had been taken in 1849; its figures had lain among other figures in the British office for three years. On this day in 1852 the Chief Computer of the Survey, working over the figures, made the astonishing discovery that "Peak Fifteen" was over twenty-nine thousand feet high. With the news he rushed into the office of the Surveyor General.

No longer was this snowy height to go unnoticed in the lists. Sir Andrew Waugh named it after his predecessor, Sir George Everest, under whose direction the survey had been undertaken. Afterwards the explorers who approached the mountain found that the Tibetan name was "Chomolungma," which means "The Goddess Mother of the World." It had not taken the measuring instruments of the white man to make known to the worshippers of the Sacred Mountain its unique glory. They had sensed it in their hearts.

II

1852–1921

For nearly seventy years Mount Everest continued to hold its remoteness and unapproached

dignity, protected not only by the mountains which surround it but also by the jealous mountain dwellers of Tibet and Nepal, who allowed no foreigner permission even to approach it.

But in 1921 a preliminary expedition was made to study the possible routes of approach. In 1922 a party of explorers, with the backing of the Royal Geographical Society and the Alpine Club, went far towards the summit before they met defeat. In 1924 members of the same group, making a second attempt, came within six hundred feet of this highest point in the world. Perhaps two of them may have reached the summit. If they did, as the Tibetans might say, the Goddess Mother took them to herself, for they had come nearer to heaven than any man may come and still have any desire to go back into the world below.

Why did these men risk untold hardships? Why were they willing to venture their lives a hundred times, with the chances for their success at best only one to fifty, in the attempt to reach this highest spot on earth?

This was the question which Leigh-Mallory, one of the two men who mounted highest on the last ascent and then disappeared forever from view, was asked when he came to America to lecture after the preliminary 1921 expedition.

"Why?" he said, and paused a moment before he answered, "*Because it is there.*"

So spoke, so speaks always the true explorer.

"The doom of Everest is sealed," said Sir Francis Younghusband, leader of the 1904 British expedition into the hitherto forbidden land of Tibet, "for the simple and obvious reason that Man grows in wisdom and stature, but the span of the mountain is fixed. Everest fights stoutly with her many terrible weapons. She is surrounded by unscalable rocks, which are her armor, but she fights blindly beneath her armor. She cannot learn from experience. She cannot rise to occasions; whereas she is beset by an adversary who has all these advantages over her, for man's full cunning will find means to outwit the mountain's allies. Each fresh check he receives will only heighten his spirits and he will return undaunted to the battle. This doom can be seen relentlessly closing in upon Everest. Man is remorselessly overtaking her. Forty years ago he was very humble and did not presume to think of anything higher than twenty-one thousand feet. Twenty years ago he had reached twenty-three thousand feet. Ten years ago he had attained nearly twenty-five thousand feet. Arithmetic alone shows that twenty-nine thousand feet must follow and Everest be vanquished."

To tell the story of the many secret trips taken in fifty years into the Forbidden Land in order to survey the mountain would fill a volume or a set of volumes. At first no white man could venture

MT. EVEREST ABOVE THE CLOUDS

Men have gone within 600 feet of this highest spot on our planet

From Ewing Galloway, N.Y.

LOOKING FORWARD INTO THE NEW AGE

Charles A. Lindbergh beside the plane in which he made his transatlantic flight

even within the kingdom of Tibet. But native Indians, trained in the art of surveying, disguised themselves and risked their lives to enter. Safeguarded even in the government records under the group name of "The Pundit Explorers," with only their initials, "A. K." and "M. H." to identify them, two men spent years gathering the necessary geographical data concerning the mountain and its approaches. When they had stood the strain as long as they could, others took up their work.

"They would leave on their journeys," says Captain Noel, photographer of the expedition in his thrilling volume, "The Story of Everest,"* to which we are indebted for much of the detail of this story, "and disappear sometimes for years, reappearing unexpectedly with the geographical knowledge so laboriously collected. They counted their every step by the revolution of their prayer wheels, or by the beads on their rosaries. At night they would write their notes on a roll of paper hidden inside the prayer wheel. They recorded compass bearings of mountains or rivers passed by means of little compasses cleverly disguised as amulets worn round their necks. They carried boiling-point thermometers inside hollow walking sticks for the measurement of altitudes."

Gradually, laboriously, data were accumulated

*"The Story of Everest," by Captain John Noel. Little, Brown & Company, 1927.

through the years. But still the great central section of the huge mountain wall of the Himalayas which surrounded Everest was a blank space on the white man's map. Let any one who wonders why this should be look at a map of this mountain land which forms the backbone of the continent for a distance of two thousand miles. Recent calculations show that there are in this region one hundred peaks 24,000 feet high, twenty peaks 26,000 feet high, six peaks 27,000 feet high, and finally Everest, which towers 29,145 feet high, five and a half miles above sea level.

Before the white explorer could begin to give his attention to the almost insuperable physical barriers set up by Nature to guard her highest spot, he had to deal with the human obstacle of a race of men which had jealously guarded their homes and their sacred places from foreign approach for more centuries than any one could either remember or record. Even after the British military expedition of 1904, the Tibetans refused to allow any foreign approach to their Sacred Mountain.

What could not be accomplished by force was, however, won by friendship. Sir Charles Bell, an English governing official on the frontiers of Tibet, had devoted many years to establishing friendly relations with the people. He had mastered their language, an almost impossible task for a foreigner. He had come to understand their customs and

beliefs, which he always respected scrupulously. And he had become intimate with that mysterious "God-king," the Dalai Lama, who dwelt in seclusion in the Sacred City of Lhasa. To him he paid visits, being entertained as his honored guest and confidant.

Within his private room, in a secret conference from which even the Tibetan ministers were shut out, the ruler of Tibet granted to Sir Charles the desired permission to have his countrymen explore the mountain slopes.

Be it known, read the passport with its official seals to Officers and Headmen of Pharijong, Kamap, Tin-ki, and Shekar that a party of Sahibs will come to the Sacred Mountain Chomolungma. . . . You will render all help, and safeguard them.

With these magic words the long-closed portals were opened. The exploring expeditions could make their preparations.

III

1924

The story of the expeditions of 1922 and 1924 are written in history. Only by reading chapter by chapter of the hardships endured and the victories achieved can one get any idea of the magnitude of the tasks. No human beings have ever undergone greater perils than did those who went forth on

these expeditions. Every moment stands out in the annals of adventure and heroism. The lives of the men were always endangered by the altitudes at which they were working, which made it necessary for them to carry oxygen tanks and to guard their every move with all the precautions which could save their strength. They had to drive body, soul, and spirit to the limit in surroundings and under conditions that would inspire the bravest man with fear and the strongest with a sickening sense of weakness. Yet they never faltered, but went on, on, and on into heights where no man had ever before walked or worked or lived.

We can enter only into the glory and tragedy of that last great picture, seen from below when instead of triumph came defeat, when across the white snow was flung the black cross, the sign of death.

It was in the spring of 1924. The short season of possible weather for the climb was almost at an end. The dreaded monsoons were overdue, when the mountain would withdraw for another year into its impenetrable mantle of snow and wind and bitter cold. The gallant party had fought illness, snow blindness, freezing, exhaustion—all the ills that any mountain climbers have ever experienced on any height. Native porters were worn out; the white men were at the last limit of their strength

and endurance. And still the mountain loomed above them. They had mounted up, up, up towards the heavens. Twenty-five thousand feet, and still they pressed on, over chasms, up stairways cut into the ice where a slip meant death. Their supplies of oxygen were nearly gone. Yet they did not give up.

They came to the day of the last chance. All knew it. All suspected that theirs was a forlorn hope.

"The die is cast," said Mallory. "Again and for the last time we advance up the Rongbuk Glacier for victory or final defeat."

Only two men were to make the final attempt, Mallory and Irvine. Two others, Odell and Hazard, were to be their supporting party, climbing to the higher depot with supplies, while Noel, the photographer, and others stayed at the base camp.

On the historic day Noel set up his camera at the selected spot, some three miles distant, and watched as he had done many times before with successful results, for the chance to photograph the climbers as they should become visible against the white background of snow.

The day went on. Hour after hour they watched. But clouds and mists obscured the view. Night came, and another day, and still they watched. The return was long overdue. But they had one comfort. The supporting party had not returned. They were doubtless staying in the hope of render-

ing some service to those who were making the final climb.

At last the watchers called that figures could be seen moving on the Ice Cliff. Telescopes were turned on the spot. In heart-breaking suspense they watched for the signal.

"As we watched," writes Noel, "we again hoped—against hope—that they would tell us that they had found the men—frostbitten—exhausted—incapable of moving—anything, but still alive. While life existed we could go to the rescue and do our best and utmost. What would the signal be? Life, or——? I saw them place six blankets in the form of a cross. Then they went away. This was the signal of Death."

When the supporting party returned they told their story. They had seen Mallory and Irvine, tiny black specks against the white cliff, within six hundred feet of the summit, "going strong." Then the mist came, sweeping across the field of vision, and never cleared.

At great personal risk Odell made his way up to their tents, twenty-seven thousand feet up. But the tents were empty. He stood there alone in that awful silence. The men had been gone for two nights. There was no hope that they would return. Alone he made his way down to his camp and gave to those who were watching below the signal of the cross on the white snow.

Will it ever be done? Will a man go to the highest point on the face of the earth and return to the world of men? And why will men risk their lives to achieve this?

Let the answer be in the words of the brave explorer, Mallory, who lost his life in the attempt. Mount Everest will be scaled "because it is there."

On the Wings of the Morning—Lindbergh

May 20–21, 1927

"And it shall come to pass afterwards, that I will pour out my Spirit upon all flesh; and your sons and your daughters shall prophesy, your old men shall dream dreams, your young men shall see visions."—The Bible.

"I first considered the possibility of the New York-Paris flight while flying the mail one night in the fall of 1926," writes Lindbergh. In the darkness while he sped across the country in the regular line of his duty, there had come to the young aviator his vision. Six months later, on the twentieth day of May, in the year 1927, Charles A. Lindbergh lifted his plane, *The Spirit of St. Louis*, from the ground of Roosevelt Field in New York and started to fly alone across the Atlantic Ocean to France. Every preparation had been made, every detail had been carefully thought out, every precaution had been taken. The vision had been worked out in

action; the time for its fulfillment had come. Outside a limited circle, the young man of twenty-five years was practically unknown. Modest, unassuming, he had provided himself with letters of introduction to men in the French capital, so that he should not be an utter stranger in a strange land.

Thirty-three and a half hours later, in the darkness of the night of May twenty-first, he landed, almost on schedule time, at the point of his destination, the aviation field at Le Bourget, France, next door to Paris. Crowds were there to greet him. The American Ambassador took him home. The news of his success was sent by radio over the world. He awoke the next morning to find himself famous.

So the story might end, if this were only a chronicle of physical and mechanical success, of a human body and brain that could stand the test of so long-sustained a strain on nerve and sinew, and of a man-made machine created to do its master's bidding. But this was a voyage of spirit triumphing over time and space. Here was a young man who had seen a vision, and the world caught that vision.

The French people, quick, responsive, were the first to catch it. They saw in him the spirit of the New Age, the symbol of victorious Youth. Friendship radiated from him, and became the symbol of the international friendship of which he was to

become an unofficial yet important American ambassador.

Aviation has found in him its exponent. The new art, of which Peary dreamed his dream, was this lad's life. "What do you intend to do next?" the Prince of Wales asked him, when he was his guest a few days later in London. "I am going to keep on flying," replied Lindbergh. And he has!

A South American tour has demonstrated the nearness of our Southern neighbors as it could have been shown in no other way. A four-continent flight touching the edge of the Arctic region and swinging around a circle of Europe, Africa, and South America has made a notable contribution to the data concerning possible transoceanic routes. Scientific to his finger tips, Lindbergh steadfastly pursues his art, bringing to it each year greater knowledge and skill. The American public, watching his every move, gains thereby increasing confidence in aviation.

Surveying a Continent

To Richard Evelyn Byrd, American, honored officer of the United States Navy, first to fly over the North Pole, came the inner call to a greater task, the only huge task remaining for the geographer of the twentieth century, the exploration of the Antarctic Continent. He was to fly over the bottom of the world, not once only in a single

spectacular flight but in a series of scientific expeditions which were to furnish accurate knowledge of that unknown icebound continent.

The story of Byrd's flight over the South Pole on November 28–29, 1929, is familiar to all Americans. Yet there are moments in that flight which cannot be too often recalled. Chief among them is that critical time when the airplane approached that mountain barrier which it must surmount before it had an open route to the Pole. Could they lift the plane high enough to go over the "Hump," as they had familiarly named it, and still have enough gasoline left to take them to the Pole and back? On the answer to that question hung the success or failure of the flight.

Nine thousand feet up and still rising, but also driving with speed towards that towering ice ridge! Up, and up they went, tossed back and down by bumpy winds. Then the climbing ceased. "It's drop 200, or go back," was the shout of the navigator. Should it be food or gasoline that they would drop overboard? On that decision might hang the lives of all four men. "A bag of food overboard," yelled Byrd, and over it went.

Still they were not high enough. Another bag went over. More than a month's supply of food crashed on the glacier below them. Slowly, minute by minute, they neared the pass. Were they high enough? Could they slip over? Or must they drop

a load of gasoline which would mean failure to reach their goal? The speed of the plane was tremendous. Yet to its passengers the minutes seemed to crawl. Nearer and nearer they came. Would they hit the mountain wall, or slide over it? The moment came. They reached the pass. The plane slid over, with a few hundred yards to spare. Ahead was a clear route to the Pole.

Four hours beyond the mountain barrier the reckonings showed them to be over the calculated position of the South Pole. Circling above it, Byrd opened a trapdoor in the plane and dropped the American flag weighted with a stone from the grave of Floyd Bennett, his gallant companion on the flight to the North Pole, for whom their present plane was named.

They had reached their goal. What next? Not the weary journey on foot across miles upon miles of rough ice and snow, with vicious winds to combat and lofty peaks to climb, which faced the other two parties of explorers who had achieved that goal! Not, fortunately, the blinding blizzard before which Captain Scott and his party had succumbed.

"We put the Pole behind us," writes Byrd, "and raced for home."

Home in their swift-moving plane to the settlement at Little America, where their companions were anxiously awaiting them. Home, after many more arduous and anxious months to the United

States, with all the valuable scientific data gathered during their long stay. But not home to stay! The lure of the unknown was too great. Another expedition was soon being planned, with the knowledge and experience gained from the first one as a background.

Again, in 1934, the world waited anxiously for news of Rear Admiral Byrd, who had dared the extreme of personal peril in the cause of scientific investigation by living for five months alone in a hut one hundred and twenty-three miles south of the main base of the party at Little America. It had proved a perilous five months. The rescue party found Byrd weakened by illness. But he had concealed his plight in his radio messages lest they become alarmed and start too soon for their own safety in the winter night. Illness had not, however, been allowed to interfere with his purpose. The daily weather records which he had set out to make were complete.

The achievements of such scientific expeditions are hard to measure. On the first expedition Admiral Byrd and his companions mapped 160,000 miles of the Antarctic region. On the second expedition far more information will be gathered about this unknown icecap, sighted by Captain Cook in the latter part of the eighteenth century but awaiting the miracle-working machines of the twentieth century for even a partial survey.

Four and a half million miles at the bottom of the world, waiting to be surveyed!

"What a challenge," writes Byrd, "to the explorer!"

Straight Up—and Straight Down

Because we live our lives under familiar conditions of heat and cold, sunshine and darkness, we do not stop to think how narrow are the limits within which human life can be carried on. A few seconds too many spent under water mean death by drowning. A few minutes in a closed chamber of a coal mine after the air has been exhausted mean death by suffocation. Of all the feats of human daring none requires more faith than to venture in a frail machine of man's own making into a region where that machine is all that protects a man from instant death.

Such is the faith of Dr. Beebe when he descends to a depth of half a mile below the surface of the ocean in a two-ton steel sphere through the windows of which he observes the creatures dwelling at that level. Such is the faith of those explorers of the stratosphere who let a huge balloon carry the metal ball into which they have sealed themselves up ten, twelve, thirteen miles into the air. The one descends to a region where there is no air to breathe and where hundreds of tons of water press down upon his frail room and threaten to

crush its walls. He receives his oxygen for breathing through hundreds of feet of steel cable reeled out from his supply ship on the surface of the ocean. The other ascends into a region where the air is far too thin for him to breathe and live. He, too, must carry his air supply with him.

We have become accustomed to daring feats on or immediately above the earth's surface. Mount Everest, highest of the world's peaks, has lately been looked on from above by daring aviators who have flown to an altitude of thirty thousand feet above sea level in a period of ninety minutes. But to go straight up in the air, without motor or guiding steering wheel, in a cage hung from the ball of a balloon which is itself entirely at the mercy of wind and weather is an experience at the thought of which we catch our breaths and wonder. Yet men in the last few years have soared above the clouds and come to earth again in safety.

We live at the bottom of an ocean of air. The airplane rides through its lowest levels, encountering the clouds that form within the first few miles above the earth. For about seven miles up it grows colder, the higher one flies. Then comes a region called the "stratosphere," a deep layer of atmosphere where the air is far too thin to support human life, where the cold is intense and steady, where no winds blow, no air currents move to drive or toss frail airships into pockets or eddies.

Into this region have gone Americans, Russians, and a Swiss scientist. The first flights were into the lower stratosphere. In 1931 and again in 1932 Professor Auguste Piccard went straight up from the earth's surface approximately ten miles. Three Russian aviators bettered that record only to meet death when their balloon crashed on its descent. Succeeding years have seen American ascents of varying success, one sponsored by the National Geographic Society and the United States Army Air Corps in the summer of 1934, being cut short by a huge rent in the balloon which drove the gondola rapidly to earth, its passengers escaping by parachutes and landing without injury.

The story of each such flight is picturesque and thrilling. The preparations require months if not years. A large number of scientific instruments must be taken aloft, for these flights are not undertaken lightly for the sake of adventure. The purpose is scientific. Men of science are at this moment deeply interested in "cosmic rays" coming from far beyond the earth's surface and creating mysterious effects at the earth's surface. They are being studied on our highest mountain tops. Now they can perhaps be tested by delicate instruments carried ten or twelve miles up in the air.

What is it like up there in that cloudless, still cold region? The sky is beautiful, says Professor Piccard, almost black, "a bluish purple—a deep

violet shade—ten times darker than the earth, but it still is not quite dark enough to see the stars. The sun, however, seems brighter than when seen from sea level." Others have reported that they saw stars faintly and that the moon was visible by day.

Beyond the interest of the scientist, there is an amazing suggestion made by prophets in the field of aviation that rapid airplane flights can be made in this remote region. The few trips that have been made with balloons show that man can live at that height in an airtight cabin. If engines can be adapted to these conditions, airplanes might ascend past the layers of clouds and air pockets into this quiet region where rapid travel would seem assured.

It is a far look into the future. But it shows the daring vision of man. The explorer takes the risks and charts the trail. Sooner or later his trail, which he has blazed amid hardships and with incredible daring, is followed by others for whom he has prepared the way. When he leaves the safe atmosphere in which he can breathe and mounts into the stratosphere, man is taking the final risk as he journeys "into the unknown."

To be alive in such an age!
With every year a lightning page
Turned in the world's great wonder-book
Whereon the leaning nations look.
When men speak strong for brotherhood;
For peace and universal good;
When miracles are everywhere,
And every inch of common air
Throbs a tremendous prophecy
Of greater marvels yet to be.

* * * * * *

To be alive in such an age!
When man, impatient of his cage,
Thrills to the soul's immortal rage
For conquest—reaches goal on goal,
Travels the earth from pole to pole,
Garners the tempests and the tides,
And on a dream triumphant rides.

* * * * *

To be alive in such an age!
To live to it!
To give to it!

* * * *

Look to the work the times reveal!
Give thanks with all thy flaming heart,
Crave but to have in it a part.
Give thanks and clasp thy heritage—
To be alive in such an age!

ANGELA MORGAN.

From "Selected Poems" by Angela Morgan. Dodd, Mead & Company, Inc., 1927.

A TIME TABLE OF "GREAT MOMENTS IN EXPLORATION"*

(All data are A. D. except when otherwise indicated)

TIME	EXPLORATION	PERSON	PAGE
Prehistoric	The Mediterranean Sea	Ulysses	3
613 B. C.	Circumnavigating Africa	Phoenicians	7
333 B. C.	The British Isles—"Thule"	Pytheas	12
326 B. C.	Persia to India	Alexander the Great	19
3rd Century B. C.	India to North Africa and Europe	Asoka	26
55–54 B. C.	Across the Rhine; Britain	Julius Caesar	29
1000 A. D.	"Wineland"—America	Leif the Lucky	37
750–900	Africa—India—Ceylon	Arabs	45
1246, 1255	Russia, Mongolia	The Friars	48
1271–1295	Europe to Cathay (China)	Marco Polo	60
15th Century	North Africa	Prince Henry	71
1492	The New World—America	Columbus	77
1486–1497	To India around Africa	Diaz, Vasco da Gama	83
1513	Panama to the Pacific	Balboa	87
1520	The Pacific—Around the World	Magellan and his men	95

*Within the limits of one book it has been impossible to include all the explorers and explorations that deserve a place. This time table is intended to serve as a guide and index to those selected, either as outstanding or as typical of their period, for inclusion in this volume.

TIME	EXPLORATION	PERSON	PAGE
1519	Mexico	Cortez	105
1527	Peru	Pizarro	114
1609	New York	Hudson	118
1603–1635	Canada, Great Lakes	Champlain	122
1603	Plymouth	Pilgrims	125
1577	California—Around the World	Drake	131
1768–1779	Antarctic—Pacific Ocean	Cook	137
373(?)–463	Ireland	St. Patrick	149
1871	Africa	Livingstone	154
1553	Russia	Chancellor	163
1853–1854	Japan	Perry	170
1848	California	Gold Seekers	181
1867–1869	South Africa	Diamond Hunters	185
1878	Caves of France	Sautuola	193
1870	Troy	Schliemann	197
1922	Tombs of Egypt	Carter,Carnarvon	203
1909	North Pole	Peary	213
1911, 1912	South Pole	Amundsen, Scott	217
1926	Over the North Pole	Byrd, Amundsen	222
1832–1836	Around the World	Darwin	229
20th Century	Arctic	Stefansson	232
20th Century	Underseas	Longley, Beebe	236
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1924	Up Mount Everest	Mallory, Irvine, etc.	251
1927	Over the Atlantic	Lindbergh	261
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